PowerFlex® Low Voltage AC Drives Selection Guide

Allen-Bradley

Powerful Performance. Flexible Control.

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Rockwell Automation

PowerFlex Low Voltage Drives Selection Guide

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Drive Productivity with the Versatile PowerFlex Family

Powerful performance. Flexible control.

Every drive in the Allen-Bradley® PowerFlex family has been designed with your productivity in mind – regardless of your application. The broad range of control modes fits virtually any motor control requirement, while the combination of features, options and packaging provides application versatility. Add in simplified programming and configuration – along with safety features designed to not only protect personnel and assets but also reduce downtime – and you'll find there's a PowerFlex solution to meet your application demands.

With a complete portfolio covering global voltages and a wide range of power ratings, the PowerFlex family of drives offers a common user experience – out of the box and on the line.

Compact PowerFlex drives deliver a simple and cost effective solution for machine level, stand alone control applications or simple system integration. Designed for ease of use, this general purpose class of drives provides a compact package to optimize panel space and application versatility.

Architecture PowerFlex drives provide a broad set of features, application specific parameters and are ideal for high performance applications. This class of drives is designed for advanced application flexibility and control system integration.

Scalable, Flexible Motor Control

Because there are a wide variety of application requirements, PowerFlex drives offer a broad range of motor control solutions. From open loop speed regulation to precise position, speed and torque control, the PowerFlex family of drives can meet the simplest to the most demanding applications. The family also features a wide selection of hardware, software, safety and packaging options to help fit your needs.

- Reduce total cost of ownership by selecting a drive built for application requirements, with as many options as the application requires
- Boost productivity with specific application control such as TorqProv™ for lifting applications and Pump-Off for oil wells
- Protect against unplanned downtime with advanced diagnostics and notification of irregular operating parameters
- Easily configure and commission with software, tools and wizards

"There's no way we could have been as successful as we were without Rockwell Automation. From mechatronics to motor and drive selection to start-up support, Rockwell Automation has provided an immense amount of value during every step of the design and delivery process."

Rodney Pennings
Paper Converting Machine Company – US

Motor Control

For optimized motor control solutions for any application, the PowerFlex family leverages a wide range of control technologies to give you the ability to meet virtually any application requirement from open loop speed regulation to precise torque and speed control.

In addition to industry standard motor control, the PowerFlex family offers unique control technologies that can provide you with even greater application flexibility.

FORCE™ Technology – FORCE is the Allen-Bradley patented Field Oriented Control, which is a version of Flux Vector Control. This provides excellent low speed/zero speed performance and delivers accurate torque and speed regulation.

"We believe in maintaining motors for the long run. It saves us more money to dedicate our efforts toward protecting these motors instead of running them until they break."

Bob Wright
Ash Grove Cement – US

DeviceLogix™ – DeviceLogix is an embedded control technology in selected Allen-Bradley products that can control outputs and manage status information onboard a device. A drive with DeviceLogix technology can help improve system performance and productivity by controlling outputs and managing status and information within the drive. Help speed reaction time by processing in the drive, which reduces dependency on network throughput and provides an option for decision making if communication is lost with the main controller. This technology can be found in the PowerFlex 750-Series.

DriveLogix™ – The PowerFlex 700S AC Drive with DriveLogix option offers an embedded Logix processor to provide optimized integration for demanding control in drive systems or stand-alone applications. The PowerFlex 700S drive with DriveLogix supports the common programming environment and multiple programming languages supported by all Logix platforms.

SynchLink™ – A drive-to-drive data link available in the PowerFlex 700S drive is a high-speed, synchronous, drive-to-drive data link for transmitting synchronized drive and application data. SynchLink offers process coordination and performance beyond that of standard control networks.

Specific Application Control

Select PowerFlex drives have specialized drive parameters configured to support a particular application. Application Sets are a configuration of the standard drive parameters designed to simplify a user's implementation of a standard drive application without the need for custom programming.

Positioning – The PowerFlex 40P, 525, 700, 700S and 750-Series are optimized for single-axis applications. With features ranging from simple position and velocity profiling and point-to-point planners to more complex electronic gearing, registration, homing and safety capabilities these drives are ideal for speed and position control applications.

TorqProve™ – For lifting applications this helps ensure control of the load in any lifting or hoisting application. This advanced control capability assures that the mechanical brake has control of the load when stopping the drive and the drive has control of the load when releasing the brake during any move command. Combined with patented FORCE™ Technology, TorqProve helps eliminate concerns with brake timing and environmental changes and can significantly reduce wear and tear on mechanical brake with smooth operation and reduced machine stress. This standard feature is available in the PowerFlex 700 and 755.

Pump Off – This unique feature specific for oil well applications is a patented pump-off function that measures the torque and currents on a motor to determine flow from a well. This alternative to traditional mechanical flow meters allows pump operators to optimize production based on the flow of the well and can also help reduce downtime by protecting the rod and motor assets. This feature is available in the PowerFlex 700, 753 and 755 drives.

"We needed drives that were easy to integrate and small enough to fit in the limited space available …When we saw how simple it was to integrate Allen-Bradley AC drives with our Allen-Bradley ControlLogix controllers thanks to the Integrated Architecture system, we were sold."

Chuck Atchison
Leitner-Poma – US

Enclosures

The PowerFlex family of drives are available with factory and field installable enclosure options to meet most environmental requirements. These packaging options include open type cabinet mount, extra protection flange mount and extra protection wall mount for harsh environments and meet IP and NEMA requirements including:

- IP00/IP20 & NEMA/UL Open Type
- IP66 & NEMA/UL Type 4X and 12
- IP54 & NEMA/UL Type 12

"With the EtherNet/IP connectivity enabled by the drives, we're able to access a wide range of operating and performance data. We can track run time off of the drives themselves, and monitor loads and other parameters for better diagnostics and more proactive maintenance."

Richard Stewart
Evergreen Packaging – US

Communications

Easily manage information from shop floor to top floor and seamlessly integrate your complete system while controlling, configuring and collecting data.

The Allen-Bradley PowerFlex family of drives uses open network architecture, which provides the common set of features and services for the common industrial protocol (CIP) used in EtherNet/IP,™ DeviceNet™ and ControlNet™. Providing the ability to control, configure and collect data on a single network simplifies plant communication and can help lower total cost of ownership.

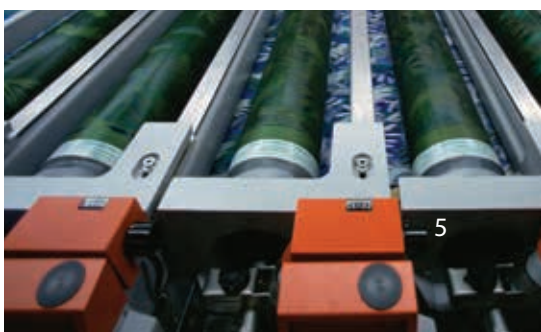
CIP is a major component within the Open Network Architecture, and it provides you with the following common features:

- **Common control services** – provides you with a standard set of messaging services for all three networks within the NetLinx architecture.
- **Common communication services** – lets you configure and collect data from any network using common routing capabilities. This saves time and effort during system configuration because no routing tables or added logic are necessary to move data between networks.
- **Common base knowledge** – reduces the amount of training needed when moving to different networks within the architecture by providing similar configuration tools and features.

EtherNet/IP allows you to connect your entire enterprise on a single network and collect detailed status information to make data-driven decisions.

In addition to linear and star network topologies, optional dual port EtherNet/IP allows PowerFlex drives to support device level ring (DLR) topologies. This can help reduce your cabling needs, gives your system resiliency from the loss of one network connection and provides fault-tolerant connectivity for optimum drive availability.

In addition to CIP open network architecture, PowerFlex drives are capable of supporting industrial protocols found throughout the world. See the drive options for more details.



Premier Integration Simplifies Development, Use and Maintenance

By combining the advanced capabilities of the Rockwell Automation Integrated Architecture and the communication capabilities of PowerFlex drives, you can achieve an exceptional level of integration between drives and controllers. The benefits of this time-saving integration range from reduced development time to simplified maintenance.

To achieve this integration, PowerFlex drives use add-on profiles in Studio 5000™ Logix Designer software (formerly RSLogix™ 5000) to streamline drive installation.

Add-on profiles minimize the need to individually program the required parameters and tags. You no longer have to complete complicated programming functions when installing PowerFlex drives or constantly refer back to user manuals for specific parameter and tag information. All PowerFlex drives on EtherNet/IP or ControlNet are able to take advantage of these add-on profiles.

In addition, Automatic Device Configuration (ADC) support for the PowerFlex 755, PowerFlex 753* and PowerFlex 525 AC drives helps reduce downtime. With ADC, an Allen-Bradley Logix controller can automatically detect a replaced PowerFlex drive and download all configuration parameters. This feature is available for PowerFlex drives on EtherNet/IP.

Easy-to-use tools help reduce development time and require no specialized knowledge

- Dynamically select drive parameters transmitted as network I/O
- Auto-generation of descriptive tag names minimizes the need to enter individual tag descriptions
- Auto-generation of respective tag data types minimizes the need to convert from one data type to another
- Wizards with advanced graphical interfaces walk you through drive parameter configuration
- Minimize errors associated with using multiple software tools
- Single development environment to configure and program your entire Logix/drive system
- Configuration of both controller and drive network connections from a single location minimizes I/O mismatch errors
- Copy and paste function makes duplicating drives fast and easy
- Drives can be added to the system at any time without the need to shut down production

Access, edit and save drive information to the control system project with ease

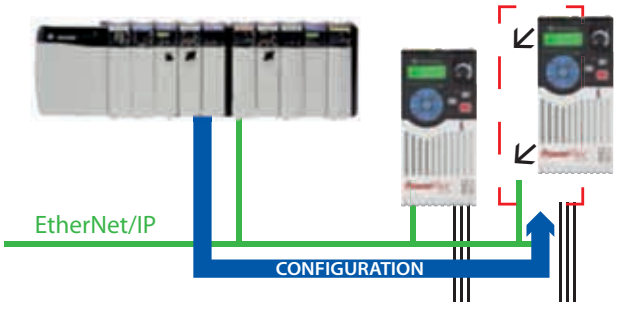
- Drive configuration is saved as part of the Studio 5000 Logix Designer (or RSLogix 5000) project file (*.acd) and also stored in the Logix controller, so there's no need to store and maintain multiple files – you only need one file for both the controller and all drive configurations

Easily download global objects and faceplates

- You can use the same tag names generated by the drive add-on profiles to utilize global objects and faceplates for a FactoryTalk® View HMI display

Easy to Maintain

- Diagnostic, fault, alarm, and event information are integral to Studio 5000
- Single repository of configuration data speeds drive replacement
- Continue to use DriveTools SP to import and export drive configuration files between the family of PowerFlex drive programming tools and Studio 5000



With Automatic Device Configuration (ADC), the Logix controller can automatically detect a replaced PowerFlex 525, 755 or 753* drive, flash it to its appropriate firmware and download all configuration parameters, minimizing the need for manual reconfiguration. This productivity-enhancing feature is available with Studio 5000 Logix Designer and RSLogix 5000 v20.

*PowerFlex 753 AC drives require a dual port EtherNet/IP communication card for ADC

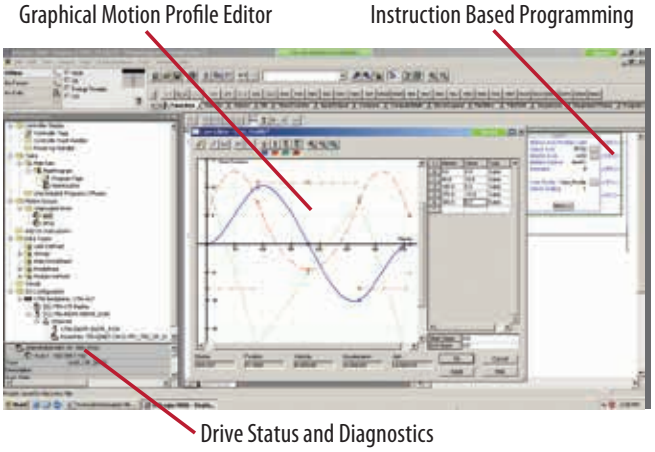
Drive Control Instructions in the Logix Environment for PowerFlex Drives

PowerFlex 755 AC drives offer the option of configuration with drive instructions embedded in Allen-Bradley ControlLogix® and CompactLogix™ Programmable Automation Controllers (PAC). These are the same configuration parameters and programming instructions used by Allen-Bradley Kinetix® servo drives. The generated application code can be applied to both drive platforms to significantly reduce programming time and provide a common, enhanced user experience.

Engineering tools within a single software package – Studio 5000™ Logix Designer – provide simplified configuration, programming, commissioning, diagnostics and maintenance for the PowerFlex 755 and Kinetix servo drives. This integration simplifies use and helps to deliver the accuracy and synchronization required by the application.

In addition, the use of EtherNet/IP for your PowerFlex and Kinetix drives helps to increase machine design flexibility, improve system performance, and reduce system cost.

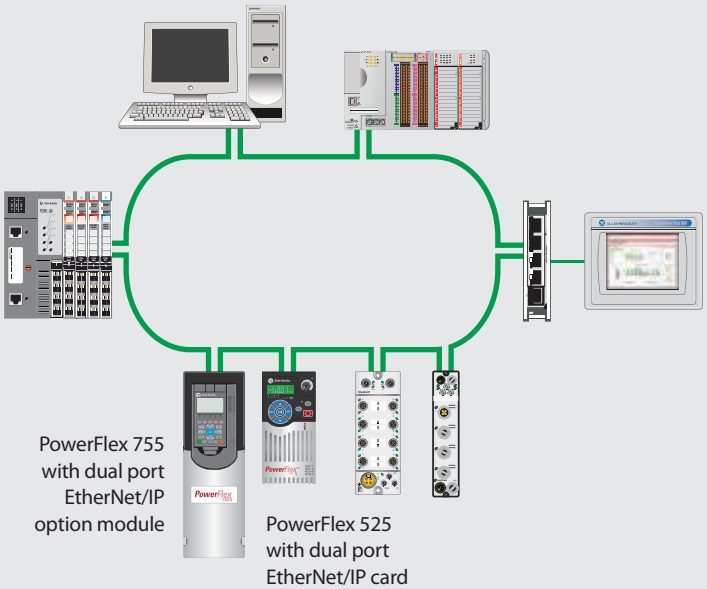
- EtherNet/IP uses standard networking, and allows you to effectively manage real-time control and information flow for improved plant-wide optimization, more informed decision-making and better business performance
- This EtherNet/IP-based solution uses CIP Motion™ and CIP Sync™ technology from ODVA built on the Common Industrial Protocol (CIP)



Studio 5000™ Logix Designer (and some versions of RSLogix 5000) software provides complete support for PowerFlex 755 VFD drives and Kinetix 6500 servo drives for standardized operation and consistent behavior of the drives. The common user experience simplifies drive use.

- By sharing the same instructions, a Kinetix servo drive and a PowerFlex 755 AC drive have identical programming within Studio 5000™ Logix Designer and RSLogix 5000 software. The standardized operation and consistent behavior of the drives simplifies use
- Time synchronization of drives, I/O and other EtherNet/IP compliant devices provides the performance to help solve the most challenging applications
- Use of standard EtherNet/IP allows you to connect to a large number of commercial and industrial devices; there's no need for proprietary hardware or software

EtherNet/IP–A Single Network for Complete Machine Control



Connect Your Entire Enterprise

Benefit from the EtherNet/IP network for complete machine control that simplifies and enhances machine design.

- Low cost, high performance and easy to use as compared to a multi-network architecture
- Easily integrate any PowerFlex drive, I/O, smart actuators and any other EtherNet/IP connected device
- Dual port EtherNet/IP connectivity supports ring topologies, which provide device level ring (DLR) functionality and optimum drive availability
- EtherNet/IP is an established, broadly-adopted network

Safety Solutions that Help Improve Productivity

Safety is a crucial concern for every type of automation. Protecting personnel and assets is always a high priority, with far-reaching benefits. However, in the past, implementing safety solutions often meant sacrificing productivity. PowerFlex AC drives can assist you in solving that dilemma by helping to provide protection for your people and equipment while also reducing unplanned downtime.

PowerFlex AC drives offer safety options designed to help you best meet the needs of your application. PowerFlex 40P, 70, 700H, 700S and 750-Series AC drives are available with optional Safe Torque-Off (DriveGuard®) functionality offering Safe-off control. Safe Torque-Off is a standard embedded feature on the PowerFlex 525 AC drive.

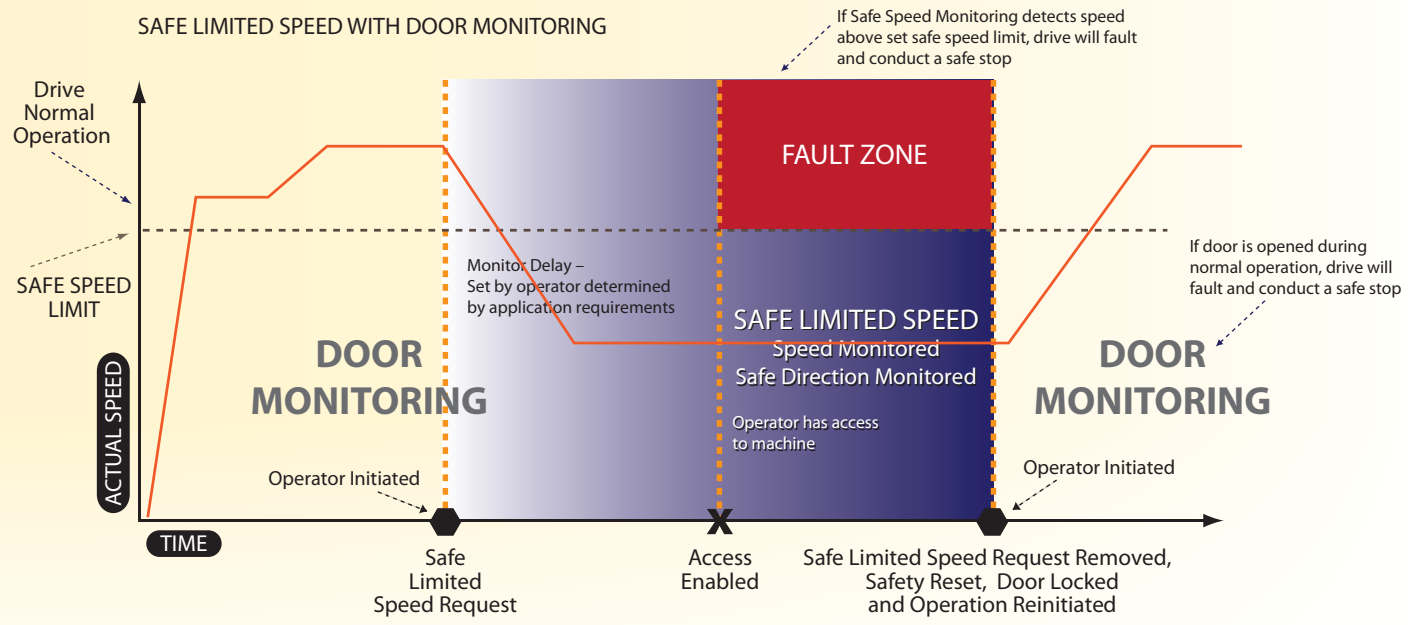
Safe Torque-Off is ideal for safety related applications requiring removal of rotational power to the motor without removing power from the drive. Safe Torque-Off functionality offers the benefit of quick start-up after a demand on the safety system and helps reduce wear from repetitive start-up. It provides safety ratings up to and including PLe/SIL and CAT 3.

The Safe Speed Monitor provides a solution for applications using PowerFlex 750-Series AC drives that can benefit from access to a safety zone while there is limited motion. In addition, the Safe Speed Monitor has an integrated monitoring relay to save additional panel space installation labor. This option carries a safety rating up to and including PLe/SIL and Cat 4. With the Safe Speed Monitor option you can safely monitor and control the speed of your application which allows operators to perform process or maintenance work without stopping the machine.

Drives without a safety option can be configured with the MSR57P Safety Relay to achieve the same safe limited speed capability and safety ratings.

Safe Speed Monitor option provides the following functionality:

- Safe Torque-Off
- Stop Categories 0 and 1
- Safe Stop
- Safe Limited Speed
- Safe Maximum Speed
- Safe Direction
- Safe Maximum Acceleration
- Zero Speed Monitoring
- Door Control and Monitoring
- Enabling switch input


SAFE LIMITED SPEED WITH DOOR MONITORING
If Safe Speed Monitoring detects speed above set safe speed limit, drive will fault and conduct a safe stop
Drive Normal Operation
SAFE SPEED LIMIT
ACTUAL SPEED
FAULT ZONE
Monitor Delay – Set by operator determined by application requirements
DOOR MONITORING
SAFE LIMITED SPEED
Speed Monitored
Safe Direction Monitored
Operator has access to machine
DOOR MONITORING
If door is opened during normal operation, drive will fault and conduct a safe stop
Operator Initiated
Operator Initiated
TIME
Safe Limited Speed Request
Access Enabled
Safe Limited Speed Request Removed, Safety Reset, Door Locked and Operation Reinitiated

The Right Motor Solution for Improved Efficiency

Drive Efficient Operations

Improved motor control performance and motor efficiency means greater overall production efficiency. PowerFlex drives are capable of providing both an immediate and measurable impact on energy use and operational efficiency.

- Help reduce and track energy consumption by applying a PowerFlex drive to your application
- Predict mechanical problems and help improve performance with diagnostics and real time data
- Access historical data directly from the factory floor

Entire Plant Solutions from Plant Floor to Top Floor

As a global automation leader, Rockwell Automation is uniquely positioned to help our customers capitalize on the business benefits of integrating factory floor controls and enterprise systems.

When you choose a PowerFlex drive, you are receiving industry-leading motor control and protection, plus the advanced system-wide communication capabilities of the Rockwell Automation Integrated Architecture™. With this you get an Intelligent Motor Control solution, where you can expect faster programming and installation, decreased mechanical wear, reduced energy consumption and improved motor performance.

World Class Offering

The PowerFlex family of drives is backed by over 100 years of motor control application and expertise.

- Meet most environmental requirements with factory and field installable packaging options from cabinet and wall mount to extra protection for harsh environments
- Meet standards worldwide including UL, CE, CUL, C-Tick, RoHS
- Support drive system installation with the largest network of services and support

Energy Savings Calculators

See how installing a PowerFlex drive for your fan or pump applications can reduce energy costs when compared with a traditional flow control method.

Download the tools at:
http://www.rockwellenergycalc.com

Rockwell Automation

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Available on the App Store

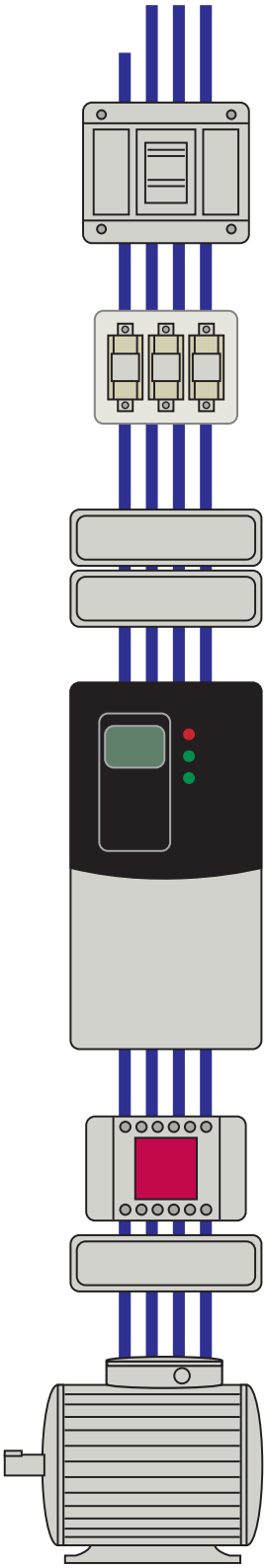
GET IT ON Google play

"While installing the drive, we were able to integrate the new solution with the existing components without interrupting services."

Esposito Orfino
Syel – Italy

Line & Load Options

Typical drive application



AC supply source

Input line reactor recommended when line voltage imbalances are greater than 2%

Input fusing and circuit breakers

See listings in the product user manuals.

Line reactor

Needs to be applied if:

a) Installation site has switched power factor correction capacitors

b) Installation site has power interruptions or voltage dips

c) The transformer is too large in comparison to the drive

(www.rockwellautomation.com/literature, refer to publication: DRIVES-IN001_).

Input filter

Compact PowerFlex drives: External EMC filter required for EMC compliance. With PowerFlex 525 AC drives, EMC filtering is embedded at 200V and 400V while optional for all voltages. Architecture drives: External EMC filter only required with long motor cables and/or specific immunity requirements.

AC drive

Normal duty (ND) rating: 110% overload for 1 minute and 150% overload for 3 seconds. No excessive starting overload, transient overload or high duty cycle. The majority of typical AC drive applications are ND.

Heavy duty (HD) rating: 150% overload for 1 minute and 180% overload for 3 seconds. Required for high starting torque (e.g., heavily loaded conveyors), high brake-away torque (e.g., extruders and mixers) and high running torque (e.g., reciprocating compressors).

Output device or cable termination

Required if motor cable lengths exceed stated values (www.rockwellautomation.com/literature, refer to publication: DRIVES-IN001_).

AC motor

eTOOLS

Product Selection Toolbox

The Product Selection Toolbox is a collection of product selection and system design software tools that help you select Allen-Bradley products and design application solutions using those products.

From this tool you can create a single bill of material for the complete range of Allen-Bradley products; configure Motor Control Bus Systems, Motor Control Centers, Automation Systems, and Motion Control Systems; and create project bids and submittal documents.

Product Selection

- Drive Selector Wizard in ProposalWorks™ – Select a Low Voltage Drive
- Integrated Architecture Builder – Configure Automation Systems
- CenterONE® – Design Low Voltage Motor Control Centers
- MCS™ Star – Design Modular Motor Control Systems

System Design and Support Tools

- eCADWorks – Get CAD Drawings
- MotionAnalyzer – Design tool for speed and positioning applications
- RailBuilder™ – Design DIN Mountable Systems

Download the tools at:
http://www.rockwellautomation.com/en/e-tools/

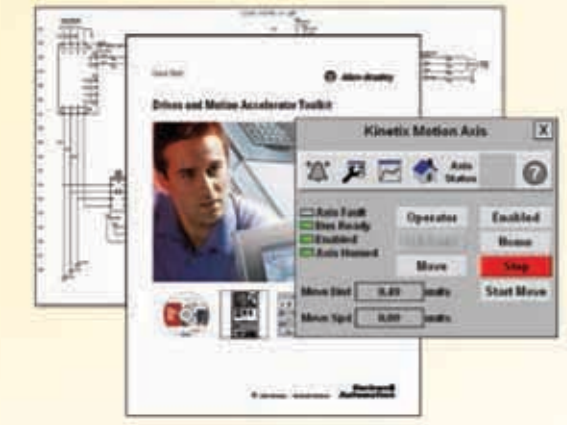
Motion Analyzer

For applications requiring more than a constant load and steady speed, Motion Analyzer software can help by handling the necessary complex calculations. Motion Analyzer features an easy-to-use format which can reduce design risk for speed and positioning applications that include PowerFlex drives or Kinetix servo drives.

Download the tool at:
http://ab.rockwellautomation.com/Motion-Control/Motion-Analyzer-Software

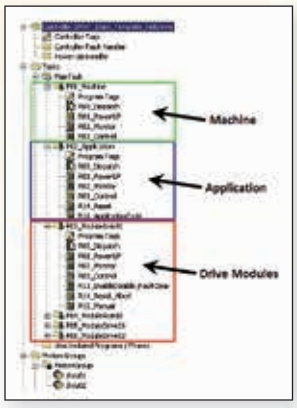
Drives and Motion Accelerator Toolkit

This collection of design tools can help you significantly reduce the time and cost of developing a new application using Rockwell Automation equipment, especially PowerFlex® AC Drives and Kinetix® Servo Drives



Toolkit provides sets of modules that are combined to produce:

- An initial Bill of Material
- A beginning set of CAD drawings for wiring diagrams and panel layouts
- An initial logic program written around the specific products used by the application
- Initial HMI screens designed around the specific products used by the application



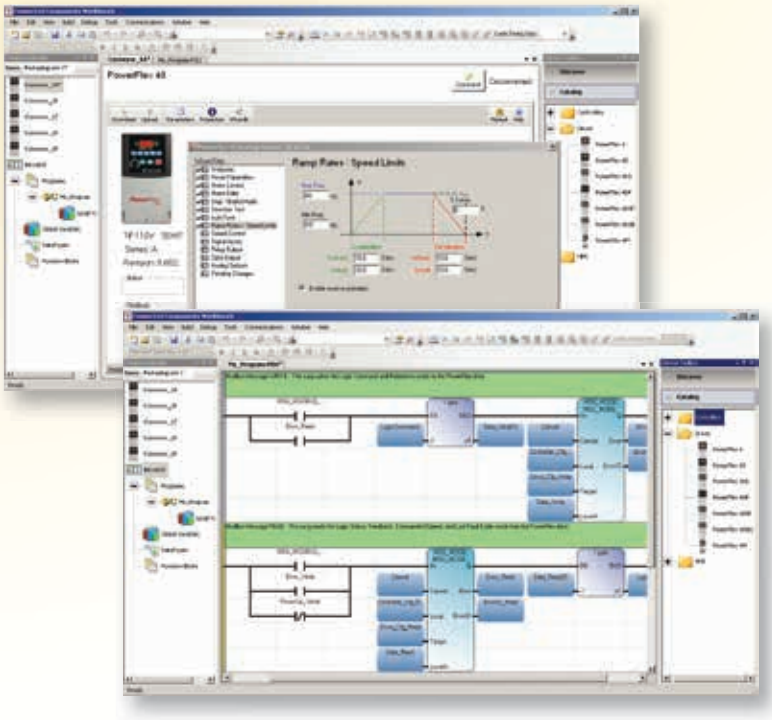
Information is delivered in a modular format.

- Module provides control and information for individual product or function
- Selecting specific modules allows you to tailor the application
- Modules are designed to interact in standard understandable and usable ways
- Selects the specific modules needed for the application
- Selected modules are combined, using standard design tools, to build starting BOM, CAD, Logic and HMI application files

Download the tool at: www.ab.com/go/iatools

Connected Components Workbench

Connected Components Workbench™ programming and configuration software supports PowerFlex AC drives, Micro800 controllers and PanelView™ component graphic terminals. This software leverages proven Rockwell Automation® and Microsoft® Visual Studio® technologies for fast and easy controller programming, drive configuration and integration with the HMI editor.



Drive features include:

- Online and offline configuration
- Linear List Parameter Editor
- Uses the same wizards as DriveExplorer and DriveExecutive
- Quick-launch of drive/peripheral user manual
- Context-sensitive "Help"
- Connection path is saved with device, reducing time for each subsequent connection
- View and clear fault queue, clear faults
- View and clear event queue, clear events
- View diagnostic items
- Reset drive/peripheral

General features:

- Easy to acquire and install
- Convenient, single development environment (controller, HMI, drives)
- Add a device via simple drag and drop from a catalog of available components or go online to add devices to your project
- IEC1131 programming using ladder, function block, and structured text
- User-defined function blocks optimize control of your machine

Faster Configuration with AppView™ and CustomView™

Leverage a new convenient feature to speed up your PowerFlex 525 drive configuration in Connected Components Workbench with the AppView tool. This feature highlights parameter groups for several of the most common applications, including conveyors, mixers, compressors, pumps and blowers.

With the settings to run these applications already in place, you can get your machine up and running faster, increasing your productivity. You can customize your machine and reduce your design and development time by quickly creating custom groups of parameters using the CustomView™ configuration tool.

This programming option, available through the HIM or Connected Components Workbench, allows you to customize your configuration by adding or removing parameters from an AppView group or save your own custom group of parameters.

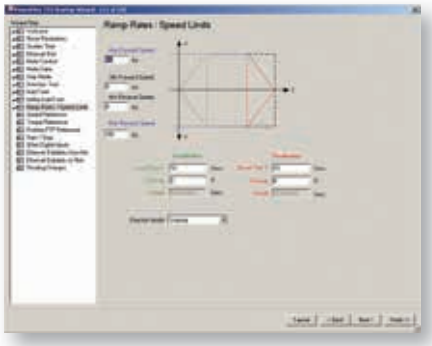
Download Connected Components Workbench software at:
http://www.ab.com/go/ccws

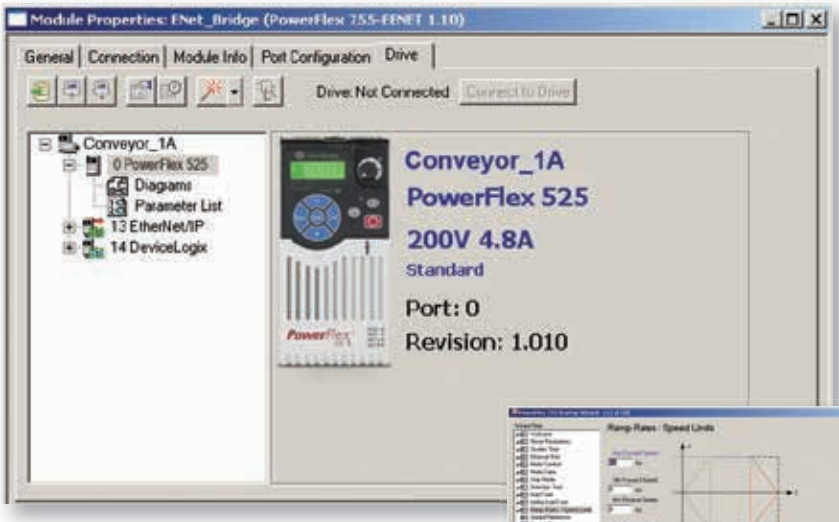
Drive Integration with Studio 5000

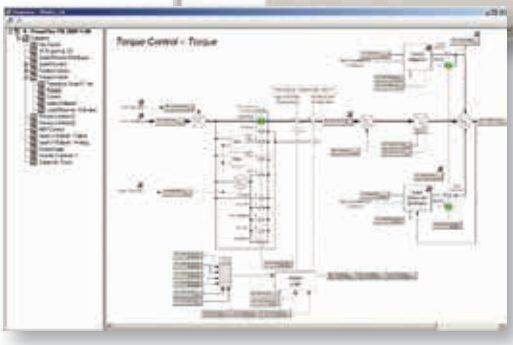
The Rockwell Automation Integrated Architecture™ system provides a convergence of control and information to help you achieve plantwide optimization. At the heart of an Integrated Architecture system, the Studio 5000 environment (formerly RSLogix 5000) serves as a single programming tool for the design and configuration of your application. PowerFlex drives are also backwards compatible with most versions of RSLogix 5000.

With the Studio 5000 Logix Designer application, you need only one software package for discrete, process, batch, motion, safety and drive-based applications. Through the use of custom add-on profiles or embedded instructions, PowerFlex AC drives can achieve seamless integration into the Logix environment for simplified machine development, use and maintenance.

The Studio 5000 Logix Designer application offers an easy-to-use, IEC61131-3 compliant interface, symbolic programming with structures and arrays and a comprehensive instruction set that serves many types of applications. It provides ladder logic, structured text, function block diagram and sequential function chart editors for program development.







Save Development Time with PowerFlex Drives and Studio 5000 Logix Designer

- Easy-to-use tools require no specialized knowledge
- Eliminates errors associated with redundant programming and configuration
- Access, edit and save drive information to a control system project with ease
- Free FactoryTalk View global objects and faceplates speed HMI development
- Flexible I/O configuration with simple drop-down boxes allows selection of specific drive data needed
- Automatic generation of descriptive tag names with proper data types
- Add a new drive node online (RSLogix 5000 v17 and higher)
- Utilizes same convenient wizards found in DriveTools SP

Download Drive add-on profiles at: http://www.ab.com/support/abdrives/webupdate/software.html

What's New

PowerFlex 525 AC Drives:

The Next Generation of Compact AC Drives

The new Allen-Bradley PowerFlex 525 AC drives combine an innovative design with simplified programming, versatile communications and other features that will maximize your system performance and reduce your time to design and deliver better machines.

PowerFlex 525 AC drives bundle an embedded port for EtherNet/IP, energy savings and safety features – all standard – in a flexible, cost-effective drive that is ideal across a variety of applications and industries. PowerFlex 525 AC drives accommodate systems ranging from standalone machines to simple system integration.

Innovative Design and Compelling Features

- Power ratings of 0.4 to 22 kW/0.5 to 30 Hp at 380/480V; global voltage classes from 100–600V
- Get drives up and running faster with application specific parameter groups for applications like conveyors, mixers, pumps and fans using the AppView™ and CustomView™ tools
- Help reduce energy costs with Economizer mode, energy monitoring features and permanent magnet motor control*
- Endures high ambient temperatures up to 50 °C (122 °F) and up to 70 °C (158 °F) with derating and using a control module fan kit
- A wide range of motor control
  - Volts per hertz
  - Sensorless vector control
  - Closed loop velocity vector control
  - Permanent magnet motor control*

*Permanent magnet motor control is scheduled for a future firmware release

Innovative Design

Removable control modules easily allow simultaneous installation and programming, saving time.

HIM

The LCD human interface module (HIM) supports multiple languages and features scrolling text. Parameter codes are followed by dynamic descriptions so you don't have to search through a manual for details.

Embedded EtherNet/IP™

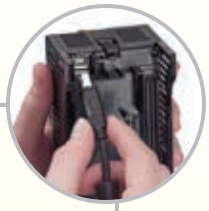
This standard feature provides Premier Integration into the Logix environment. An optional dual port card for EtherNet/IP™ supports device level ring (DLR) functionality.

Versatile

The PowerFlex 525 drive accommodates an accessory communication card and encoder card at the same time while maintaining its compact footprint.

Safe Torque-Off

Embedded safety helps protect assets and personnel by removing rotational power from the motor without powering down the drive when a safety circuit is triggered.



Simplified Programming

Helps you configure drives faster by using standard USB cables and intuitive software. Quickly program drives with a simple executable file to upload, download and flash settings.

Studio 5000

The Studio 5000 environment is an automation system design and management suite that provides a single point of access to the Logix Designer application – an interface used to develop control logic that runs in the controller. The Logix Designer software works with controllers to read and write tag information. In version 21, RSLogix™ 5000 software became the Logix Designer application.

Using Studio 5000 Logix Designer, you can configure your PowerFlex 525 AC drives similarly to previous versions of RSLogix 5000™. Use a single software tool to reduce your programming time, ease startup and commissioning and streamline diagnostics.

PowerFlex 525 AC drives are compatible with RSLogix 5000 (v17 and higher)

POWERFLEX AC DRIVES

	PowerFlex 4M AC Drive	PowerFlex 4 AC Drive	PowerFlex 40 AC Drive
Motor Control	• Volts per Hertz	• Volts per Hertz	• Volts per Hertz • Sensorless Vector Control
Application	• Open Loop Speed Regulation	• Open Loop Speed Regulation	• Open Loop Speed Regulation
Ratings 100-115V 1 Phase In/3 Phase 230V Out	• 0.2...1.1 kW • 0.25...1.5 Hp • 1.6...6 A	• 0.2...1.1 kW • 0.25...1.5 Hp • 1.6...6 A	• 0.37...1.1 kW • 0.5...1.5 Hp • 2.3...6 A
Ratings 200-240V	• 0.2...7.5 kW • 0.25...10 Hp • 1.6...33 A	• 0.2...3.7 kW • 0.25...5 Hp • 1.4...17.5 A	• 0.37...7.5 kW • 0.5...10 Hp • 2.3...33A
Ratings 400-480V	• 0.37...11 kW • 0.5...15 Hp • 1.5... 24 A	• 0.37...3.7 kW • 0.5...5 Hp • 1.4...8.7 A	• 0.37...11 kW • 0.5...15 Hp • 1.4...24 A
Ratings 500-600V	• N/A	• N/A	• 0.75...11 kW • 1...15 Hp • 1.7...19 A
Ratings 690V	• N/A	• N/A	• N/A
Ambient Temperature * Limit for Enclosure Types	• IP20: -10 to 50 ˚C (14 to 122 ˚F) • IP20 zero stacking: -10 to 40 ˚C (14 to 104 ˚F)	• IP20, NEMA/UL Type Open: -10 to 50 ˚C (14 to 122 ˚F) • IP20, Zero Stacking: -10 to 40 ˚C (14 to 104 ˚F) • IP30, NEMA/UL Type 1: -10 to 40 ˚C (14 to 104 ˚F) • Flange = 50 ˚C (122 ˚F)	• IP20, NEMA/UL Type Open: -10 to 50 ˚C (14 to 122 ˚F) • IP20, Zero Stacking: -10 to 40 ˚C (14 to 104 ˚F) • IP30, NEMA/UL Type 1: -10 to 40 ˚C (14 to 104 ˚F) • IP66, NEMA/UL Type 4X/12: -10 to 40 ˚C (14 to 104 ˚F) • Flange = 50 ˚C (122 ˚F))
EMC Filters	• Internal (1 phase 240V and 3 phase 480V) • External (1 & 3 phase)	• Internal (1 phase) • External (3 phase)	• Internal (1 phase) • External (3 phase)
Standards and Certifications	• UL, CE, cUL, C-Tick	• UL, CE, cUL, C-Tick	• UL, CE, cUL, C-Tick
Overload Capability	• 150% for 60 secs • 200% for 3 secs	• 150% for 60 secs • 200% for 3 secs	• 150% for 60 secs • 200% for 3 secs
Output Frequency Range	• 0...400 Hz	• 0...240 Hz	• 0...400 Hz
User Interface	• Local Keypad • Remote Keypad • RSLogix 5000 • Studio 5000 • DriveTools SP • Connected Components Workbench (CCW)	• Local Keypad • Remote Keypad • RSLogix 5000 • Studio 5000 • DriveTools SP • Connected Components Workbench (CCW)	• Local Keypad • Remote Keypad • RSLogix 5000 • Studio 5000 • DriveTools SP • Connected Components Workbench (CCW)
Communications Options	• Integral RS485 (Modbus RTU) • Optional: *DeviceNet, *EtherNet/IP, *PROFIBUS DP, *ControlNet, *LonWorks®, *Bluetooth® *Optional network for use only with DSI External Communications Kit	• Integral RS485 (Modbus RTU) • Optional: *DeviceNet, *EtherNet/IP, *PROFIBUS DP, *ControlNet, *LonWorks, *BACnet, *Bluetooth *Optional network for use only with DSI External Communications Kit	• Integral RS485 (Modbus RTU) • Optional: DeviceNet, EtherNet/IP, PROFIBUS DP, ControlNet, LonWorks, BACnet, Bluetooth
Analog Inputs	• Qty. 1 (unipolar voltage)	• Qty. 1 (unipolar voltage)	• Qty. 2 (1 bipolar voltage, 1 current)
Analog Outputs	• None	• None	• Qty. 1 (unipolar voltage or current)
PTC Inputs	• Qty. 1 (uses an Analog Input)	• Qty. 1 (uses an Analog Input)	• Qty. 1 (uses an Analog Input)
Digital Inputs	• Qty. 5 (24V DC, 2 programmable)	• Qty. 5 (24V DC, 2 programmable)	• Qty. 7 (24V DC, 4 programmable)
Relay Outputs	• Qty. 1 (form C)	• Qty. 1 (form C)	• Qty. 1 (form C)
Transistor Outputs	• None	• None	• Qty. 2
Dynamic Braking	• Internal IGBT except catalog numbers ending in "3"	• Internal IGBT except catalog numbers ending in "3"	• Internal IGBT
Integrated Safety	• No	• No	• No
	Found on page 22	*Found on page 26*	*Found on page 30*

* Environmental considerations may apply

PowerFlex 40P AC Drive	PowerFlex 525 AC Drive	PowerFlex 400 AC Drive
• Volts per Hertz • Sensorless Vector Control	• Volts per Hertz • Sensorless Vector Control • Closed Loop Velocity Vector Control • Permanent Magnet Motor Control*	• Volts per Hertz
• Closed Loop Speed Regulation	• Open Loop Speed Regulation • Closed Loop Speed Regulation	• Open Loop Speed Regulation
• N/A	• 0.4...1.1 kW • 0.5...1.5 Hp • 2.5...6 A	• N/A
• 0.37...7.5 kW • 0.5...10 Hp • 2.3...33 A	• 0.4...15 kW • 0.5...20 Hp • 2.5...62.1 A	• 2.2...37 kW • 3.0...50 Hp • 12...145 A
• 0.37...11 kW • 0.5...15 Hp • 1.4...24 A	• 0.4...22 kW • 0.5...30 Hp • 1.4...43 A	• 2.2...250 kW • 3.0...350 Hp • 6...460 A
• 0.75...11 kW • 1...15 Hp • 1.7...19 A	• 0.4...22 kW • 0.5...30 Hp • 0.9...32 A	• N/A
• N/A	• N/A	• N/A
• IP20, Open Type: -10 to 50 °C (14 to 122 °F) • IP20, Zero Stacking: -10 to 40 °C (14 to 104 °F) • IP30, NEMA Type 1, UL Type 1: -10 to 40 °C (14 to 104 °F) • Flange and Plate Mount: Heatsink: -10 to 40 °C (14 to 104 °F) • Drive: -10 to 50 °C (14 to 122 °F)	• IP20: -20 to 50 °C (-4 to 122 °F) • IP20 Zero Stacking: -20* to 45 °C (-4 to 113 °F) • IP20: -20 to 60 °C (140 °F), with current derating • IP20: -20 to 70 °C: (158 °F) with current derating and optional control module fan kit	• IP20, NEMA/UL Type Open, Frame C: -10 to 50 °C (14 to 122 °F) • IP20, NEMA/UL Type Open, Frame D and up: -10 to 45 °C (14 to 113 °F) • IP30, NEMA/UL Type Open, all frames: -10 to 45 °C (14 to 113 °F)
• External	• Internal (1 phase 240V and 3 phase 480V) • External (1 & 3 phase)	• External
• UL, CE, cUL, C-Tick, TUV FS ISO/EN13849-1 (EN954-1)	• UL, CE, cUL, C-Tick, TVU, ATEX, GOST-R, Semi-F47, Marine (RINA), ACS156, REACH, RoHS, KCC	• UL, CE, cUL, C-Tick
• 150% for 60 secs • 200% for 3 secs	• Normal Duty Application: 110% - 60 secs, 150% - 3 secs (For 20 Hp & above) • Heavy Duty Application: 150% - 60 secs, 180% - 3 secs (200% - 3 secs programmable)	• 110% for 60 secs
• 0...500 Hz	• 500 Hz	• 0...320 Hz
• 4 Digit LED Display and Fault Reset • Remote Keypad • RSLogix 5000 • Studio 5000 • DriveTools SP • Connected Components Workbench (CCW)	• 5 Digits, 16 segments LCD display with multiple languages and local keypad • Remote Keypad • MainsFree™ Programming via USB • RSLogix 5000 • Studio 5000 • Connected Components Workbench (CCW)	• Local Keypad • Remote Keypad • RSLogix 5000 • Studio 5000 • DriveTools SP • Connected Components Workbench (CCW)
• Integral RS485 (Modbus RTU) • Optional: DeviceNet, EtherNet/IP, PROFIBUS DP, ControlNet, LonWorks, Bluetooth	• Embedded EtherNet/IP • Integral RS485 (Modbus RTU) • Optional: Dual Port EtherNet/IP, DeviceNet, PROFIBUS DP	• Integral RS485 (Modbus RTU, Metasys N2, P1-FLN) • Optional: DeviceNet, EtherNet/IP, PROFIBUS DP, ControlNet, LonWorks, BACnet, Bluetooth
• Qty. 2 (1 bipolar voltage, 1 current)	• Qty. 2 (1 bipolar voltage, 1 current)	• Qty. 2 (1 bipolar voltage or current, 1 unipolar voltage or current)
• Qty. 1 (unipolar voltage or current)	• Qty: 1 (unipolar voltage or current)	• Qty. 2 (unipolar voltage or current)
• Qty. 1 (uses an Analog Input)	• Qty. 1 (uses an Analog Input)	• Qty. 1 (uses an Analog Input)
• Qty. 7 (24V DC, 5 programmable)	• Qty: 7 (24V DC, 6 programmable)	• Qty. 7 (24V DC, 4 programmable)
• Qty. 1 (form C)	• Qty: 2 (1 form A Relay, 1 form B Relay)	• Qty. 2 (form C)
• Qty. 2	• Qty. 2	• Qty. 1
• Internal IGBT	• Internal IGBT	• No
• Safe Torque-Off, SIL2, PLd, Cat3	• Embedded Safe Torque-Off, SIL2, PLd, Cat 3	• No
Found on page 34	*Found on page 50*	*Found on page 38*

*Permanent magnet motor control is scheduled for a future firmware release

POWERFLEX AC DRIVES

	PowerFlex 70 AC Drive	PowerFlex 700 AC Drive	PowerFlex 700H AC Drive
Motor Control	• Vector Control w/FORCE Technology with and without an encoder • Sensorless Vector Control • Volts per Hertz	• Vector Control w/FORCE Technology with and without an encoder • Sensorless Vector Control • Volts per Hertz • Adjustable Voltage Control	• Volts per Hertz • Sensorless Vector Control
Application	• Open Loop Speed Regulation • Closed Loop Speed Regulation • Precise Torque & Speed Regulation	• Open Loop Speed Regulation • Closed Loop Speed Regulation • Precise Torque & Speed Regulation • Indexer Positioning	• Open Loop Speed Regulation
Single-phase Input w/Derate	• Yes	• Yes	• Yes
Ratings 200-240V	• 0.37...18.5 kW • 0.5...25 Hp • 2.2...70 A	• 0.37...75 kW • 0.5...100 Hp • 2.2...260 A	• N/A
Ratings 400-480V	• 0.37...37 kW • 0.5...50 Hp • 1.1...72 A	• 0.37...500 kW • 0.5...700 Hp • 1.1...875 A	• 132...1600 kW • 200...2300 Hp • 261...2700 A
Ratings 500-600V	• 0.37...37 kW • 0.5...50 Hp • 0.9...52 A	• 0.75...110 kW • 1...150 Hp • 1.7...144 A	• 160...2000 kW • 150...2400 Hp • 170...2250 A
Ratings 690V	• N/A	• 45...132 kW • 50...150 Hp • 52...142 A	• 160...2000 kW • 150...2400 Hp • 170...2250 A
Ambient Temperature Limit for Enclosure Types	• IP20, NEMA/UL Type 1: 0 to 50 °C (32 to 122 °F) • Flange Mount: 0 to 50 °C (32 to 122 °F) • IP66, NEMA/UL Type 4X/12 indoor: 0 to 40 °C (32 to 104 °F)	• IP20, NEMA/UL Type Open: Frames 0-6: 0 to 50 °C (32 to 122 °F), typical Frames 7-10: 0 to 40 °C (32 to 104 °F) for chassis 0 to 65 °C (32 to 149 °F) for control • NEMA/UL Type 1: Frames 0-6: 0 to 40 °C • IP 00/NEMA Open/Flange = 40 °C (104 °F)	• IP 21/NEMA/UL Type 1 • Normal Duty = 0-40 °C (32-104 °F) • Heavy Duty = 0-40 °C (32-104 °F)
EMC Filters	• Internal	• Internal (frame 0-6 only)	• Internal
Standards and Certifications	• UL, CE, cUL, C-Tick, RINA, Lloyds Registry, ABS, SEMI F47 • TUV FS ISO/EN13849-1 (EN954-1)	• UL, CE, cUL, C-Tick, RINA*, Lloyds Registry*, ABS*, SEMI F47* • ATEX *Does not apply to frames 7-10	• UL, CE, cUL, C-Tick • ATEX with Safe Torque-Off option • TUV FS ISO/EN13849-1 (EN954-1)
Overload Capability	• Normal Duty Application • 110% - 60 s, 150% - 3 s • Heavy Duty Application • 150% - 60 s, 200% - 3 s	• Normal Duty Application • 110% - 60 s, 150% - 3 s • Heavy Duty Application • 150% - 60 s, 200% - 3 s	• Normal Duty Application • 110% - 60 s • Heavy Duty Application • 150% - 60s , 200% - 2 s* *Limits Apply
Output Frequency Range	• 0 - 500 Hz	• 0 - 420 Hz	• 0 - 320 Hz
User Interface	• Local PowerFlex HIMs • Remote PowerFlex HIMs • RSLogix 5000 • Studio 5000 • DriveTools SP • Connected Components Workbench (CCW)	• Local PowerFlex HIMs • Remote PowerFlex HIMs • RSLogix 5000 • Studio 5000 • DriveTools SP • Connected Components Workbench (CCW)	• Local PowerFlex HIMs • Remote PowerFlex HIMs • RSLogix 5000 • Studio 5000 • DriveTools SP • Connected Components Workbench (CCW)
Communications Options	• Internal DPI • DeviceNet • ControlNet (Coax or Fiber) • EtherNet/IP • Remote I/O • RS485 DF1 • BACnet • RS485 HVAC (Modbus RTU, Metasys N2, Siemens P1) • PROFIBUS DP • Interbus • Bluetooth • External SCANport • Modbus/TCP • CANopen • LonWorks	• Internal DPI • DeviceNet • ControlNet (Coax or Fiber) • EtherNet/IP • Remote I/O • RS485 DF1 • BACnet • RS485 HVAC (Modbus RTU, Metasys N2, Siemens P1) • PROFIBUS DP • Interbus • Bluetooth • Modbus/TCP • CANopen • LonWorks	• Internal DPI • DeviceNet • ControlNet (Coax or Fiber) • EtherNet/IP • Remote I/O • RS485 DF1 • BACnet • RS485 HVAC (Modbus RTU, Metasys N2, Siemens P1) • PROFIBUS DP • Interbus • Bluetooth • Modbus/TCP • CANopen • LonWorks
Conformal Coating	• Option	• Option	• Option
Analog Inputs	• Qty. 2 (1 bipolar voltage or current, 1 unipolar voltage or current)	• Qty. 2 (bipolar voltage or current)	• Qty. 2 (bipolar voltage or current)
Analog Outputs	• Qty. 1 (unipolar voltage or current)	• Qty. 2 (bipolar voltage or current)	• Qty. 2 (bipolar voltage or current)
PTC Inputs	• Qty. 1 (uses an Analog Input)	• Qty. 1 (dedicated)	• Qty. 1 (uses an Analog Input)
Digital Inputs	• Qty. 6 (24V DC or 115V AC, option card required for 115V)	• Qty. 6 (24V DC or 115V AC)	• Qty. 6 (24V DC or 115V AC)
Relay Outputs	• Qty. 2 (form C)	• Qty. 3 (1 form A, 1 form B, 1 form C)	• Qty. 3 (1 form A, 1 form B, 1 form C)
Transistor Outputs	• None	• None	• None
Internal Brake Transistor	• Standard	• Standard on Frame 0-3, Optional on Frame 4-6	• Optional (frame 9 only)
AC Input Choke	• No	• No	• Yes
DC Link Choke	• FR C-E Yes	• Yes	• No
Common Mode Choke	• External option	• Internal (frame 0-6 only)	• Internal
Integrated Safety	• Safe Torque-Off SIL, PLd, Cat 3	• No	• Safe Torque-Off SIL, PLd, Cat 3
	Found on page 50	*Found on page 58*	*Found on page 64*

PowerFlex 700S AC Drive	PowerFlex 700L AC Drive	PowerFlex 753 AC Drive	PowerFlex 755 AC Drive
• Vector Control w/FORCE Technology with and without an encoder • Volts per Hertz • Permanent Magnet Motor Control	• Available with PowerFlex 700 Vector Control or PowerFlex 700S Phase II Control boards	• Vector Control w/FORCE Technology with or without an encoder • Sensorless Vector Control • Volts per Hertz • Permanent Magnet Motor Control (Interior)	• Vector Control w/FORCE Technology with and without an encoder • Sensorless Vector Control • Volts per Hertz • Permanent Magnet Motor Control (Surface and Interior)
• Closed Loop Speed Regulation • Precise Torque Regulation • Precise Torque & Speed Regulation • Accurate Positioning	• Open Loop Speed Regulation • Closed Loop Speed Regulation • Precise Torque & Speed Regulation	• Open Loop Speed Regulation • Closed Loop Speed Regulation • Precise Torque Regulation • Precise Torque & Speed Regulation • Indexer Positioning	• Open Loop Speed Regulation • Closed Loop Speed Regulation • Precise Torque Regulation • Precise Torque & Speed Regulation • Accurate Positioning with PCAM, Indexer and Gearing
• Yes	• No	• Yes	• Yes
• 0.75...66 kW • 1...100 Hp • 4.2...260 A	• N/A	• N/A	• N/A
• 0.75...800 kW • 1...1250 Hp • 2.1...1450 A	• 200...715 kW • 300...1150 Hp • 360...1250 A	• 0.75...250 kW • 1...350 Hp • 2.1...456 A	• 0.75...1400 kW • 1...2000 Hp • 2.1...2330 A
• 75...1500 kW • 1...1600 Hp • 1.7...1500 A	• 345...650 kW • 465...870 Hp • 425...800 A	• 1...300 Hp • 1.7... 289 A	• 1...1500 Hp • 1.7...1530 A
• 75...1500 kW • 75...1600 Hp • 77...1500 A	• 355...657 kW • 475...881 Hp • 380...705 A	• 7.5...250 kW • 12...263 A	• 7.5...1500 kW • 12...1485 A
• IP20, NEMA/UL Type Open: 0 to 50 °C (32 to 122 °F) • IP21, NEMA/UL Type 1: 0 to 40 °C (32 to 104 °F)	• IP00, NEMA/UL Type Open (frame 2): 0 to 50 °C (32 to 122 °F) • IP20, NEMA/UL Type 1 (frame 3A and 3B): 0 to 40 °C (32 to 104 °F)	• IP00/IP10/IP20, NEMA/UL Open Type = 0-50 °C (32-122 °F) • Flange Mount Front: IP00/IP20, NEMA/UL Open Type = 0-50 °C (32-122 °F) • Flange Mount Back: IP66, NEMA/UL Type 4X = 0-40 °C (32-104 °F) • IP54, NEMA/UL Type 12 = 0-40 °C (32-104 °F)	• IP00/IP20, NEMA/UL Open Type = 0-50 °C (32-122 °F) • Flange Mount Front: IP00/IP20, NEMA/UL Open Type = 0-50 °C (32-122 °F) • Flange Mount Back: IP66, NEMA/UL Type 4X = 0-40 °C (32-104 °F) • IP54, NEMA/UL Type 12 = 0-40 °C (32-104 °F)
• Internal	• Internal	• Internal	• Internal
• UL, CE, cUL, C-Tick, RINA* • TUV FS ISO/EN13849-1 (EN954-1) * Applies to frames 1-6	• UL, CE, cUL, C-Tick • TUV FS ISO/EN13849-1 (EN954-1) (with 700S control)	• UL, CE, cUL, C-Tick, SEMI F47, GOST-R • TUV FS ISO/EN13849-1 (EN954-1) for Safe Torque-Off and Safe Speed Monitor options • ROHS compliant materials • Conformal Coating standard • ABS • Lloyd's Register	• UL, CE, cUL, C-Tick, SEMI F47, GOST-R • TUV FS ISO/EN13849-1 (EN954-1) for Safe Torque-Off and Safe Speed Monitor options • ROHS compliant materials • Conformal Coating standard • ABS (Frames 2...8) • Lloyd's Register (Frames 2...8)
• Normal Duty Application • 110% - 60 s, 150% - 3 s • Heavy Duty Application • 150% - 60s, 200% - 3 s	• Normal Duty Application • 110% - 60 s, 150% - 3s • Heavy Duty Application • 150% - 60 s, 200% - 3 s	• Normal Duty Application • 110% - 60 s, 150% - 3 s • Heavy Duty Application • 150% - 60s, 180% - 3s	• Light Duty Application (frames 8 and larger) • 110% - 60s • Normal Duty Application • 110% - 60s, 150% - 3s • Heavy Duty Application • 150% - 60s, 180% - 3s
• 0 - 400 Hz (Frames 1-6) • 0 - 320 Hz (Frames 9-14)	• Output frequency dependant on control boards	• 0. . .325 Hz @ 2 kHz PWM • 0. . .650 Hz @ 4 kHz PWM	• 0. . .325 Hz @ 2 kHz PWM • 0. . .650 Hz @ 4 kHz PWM
• Local PowerFlex HIMs • Remote PowerFlex HIMs • RSLogix 5000 • Studio 5000 • DriveTools SP • Connected Components Workbench (CCW)	• Local PowerFlex HIMs • Remote PowerFlex HIMs • RSLogix 5000 • Studio 5000 • DriveTools SP • Connected Components Workbench (CCW)	• Local PowerFlex 750 Series HIMs • Remote PowerFlex 750 Series HIMs • RSLogix 5000 • Studio 5000 • DriveTools SP • Connected Components Workbench (CCW)	• Local PowerFlex 750 Series HIMs • Remote PowerFlex 750 Series HIMs • RSLogix 5000 • Studio 5000 • DriveTools SP • Studio 5000 Embedded Instructions • Connected Components Workbench (CCW)
• Internal DPI • DeviceNet • ControlNet (Coax or Fiber) • EtherNet/IP • Remote I/O • RS485 DF1 • RS485 HVAC (Modbus RTU, Metasys N2, Siemens P1) • PROFIBUS DP • Interbus • Bluetooth	• See PowerFlex 700 or 700S – based on control version	• Single or Dual-port Ethernet/IP options • ControlNet (Coax or Fiber) • DeviceNet • Remote I/O • RS485 DFI • PROFIBUS DP • BACnet/IP • Modbus/TCP • HVAC (Modbus RTU, FLN P1, Metasys N2) • Bluetooth • LonWorks • CANopen	• Embedded EtherNet/IP port or Dual-port EtherNet/IP option module • CIP Motion • ControlNet (Coax or Fiber) • DeviceNet • Remote I/O • BACnet/IP • RS485 DFI • PROFIBUS DP • Modbus/TCP • HVAC (Modbus RTU, FLN P1, Metasys N2) • Bluetooth • LonWorks • CANopen
		• Standard	• Standard
• Qty. 3 (2 bipolar voltage or current, 1 unipolar voltage)		• Up to 7 total (biploar voltage or current)	• Up to 10 total (biploar voltage or current)
• Qty. 2 (bipolar voltage or current)		• Up to 7 total (biploar voltage or current)	• Up to 10 total (biploar voltage or current)
• Qty. 1 (uses an Analog Input)		• Up to 3 total	• Up to 5 total
• Qty. 6 (3 - 24V DC or 115V AC, 3 - 24V DC)		• Up to 21 total (Qty. 21 - 24V DC or Qty. 19 - 115V AC)	• Up to 31 total (24V DC or 115V AC)
• Qty. 1 (form C)		• Up to 7 total	• Up to 10 total (form C)
• Qty. 2		• Up to 7 total	• Up to 10 total
• Standard (frames 1-6) Optional (frame 9)	• Integral Regenerative capability	• Standard (frames 2-5) Optional (frame 6-7)	• Standard (frames 2-5) Optional (frame 6-7)
• Frames 1-6 No, Frames 9-14 Yes	• Yes	• No	• No
• Frames 1-6 No, Frames 9-14 Yes	• No	• Yes	• Yes
• Internal (Frame 1-9 only)	• External option	• External option	• External option
• Safe Torque-Off SIL, PLd, Cat 3	• Safe Torque-Off SIL, PLd, Cat 3 (with 700S control)	• Safe Torque-Off SIL, PLe, Cat 3 • Safe Speed Monitor SIL, PLe, Cat 4	• Safe Torque-Off SIL, PLe, Cat 3 • Safe Speed Monitor SIL, PLe, Cat 4
Found on page 70	*Found on page 76*	*Found on page 80*	*Found on page 86*

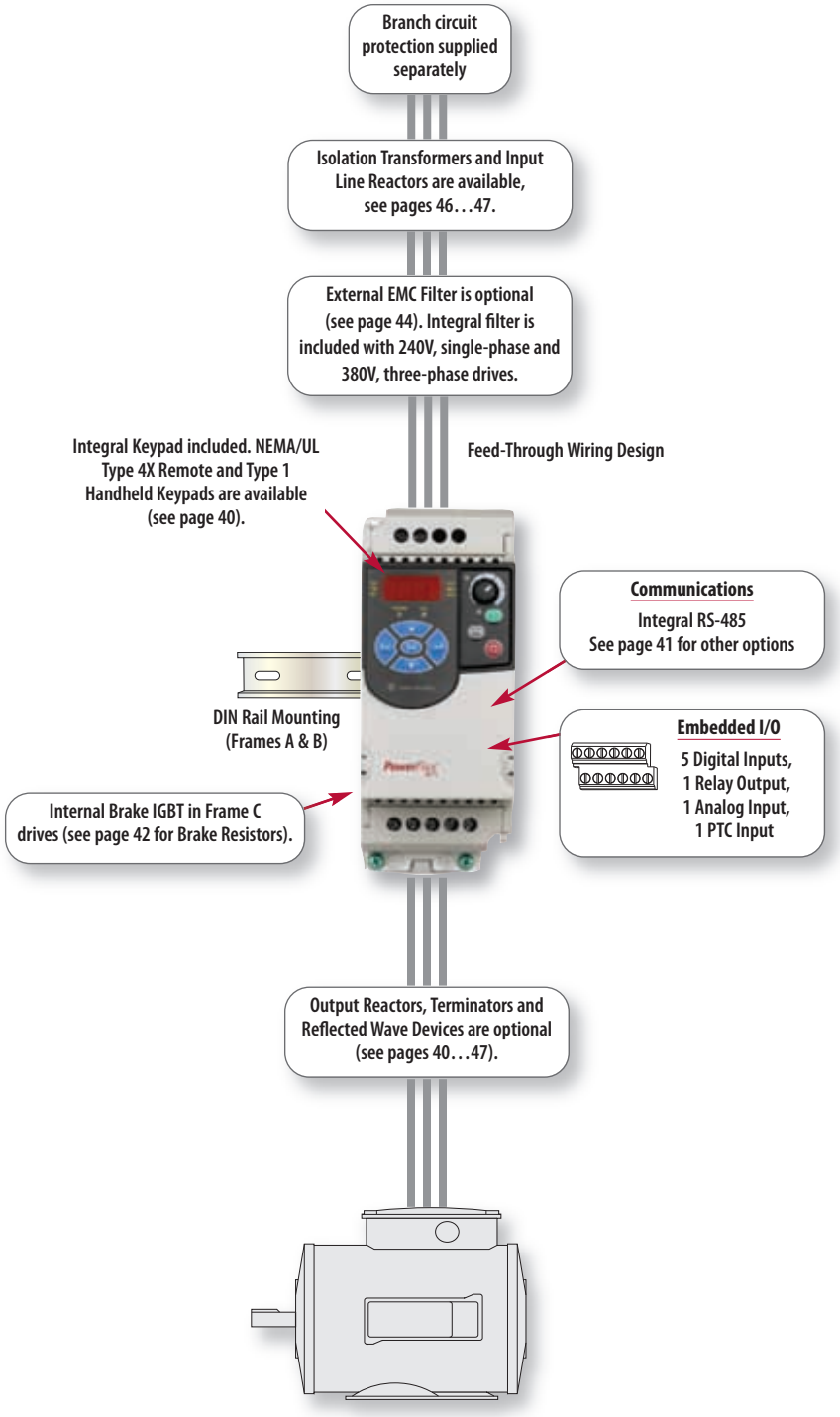
PowerFlex 4M AC Drive

Providing users with powerful motor speed control in a compact, space saving design, the PowerFlex 4M AC drive is the smallest and most cost effective member of the PowerFlex family of drives.

Providing application flexibility, feed-through wiring and ease-of-programming this drive is ideal for machine level speed control, for applications requiring space savings and easy-to-use AC drives.

PowerFlex 4M at a glance

Ratings	
100…120V	0.2…1.1 kW / 0.25…1.5 Hp / 1.6…6 A
200…240V	0.2…7.5 kW / 0.25…10 Hp / 1.6…33 A
380…480V:	0.4…11 kW / 0.5…15 Hp / 1.5…24 A
Motor Control	V/Hz Control
Enclosures	IP20, NEMA/UL Type Open
Certifications	• C-Tick • c-UL, UL • CE
Options	See pages 40… 47


Branch circuit protection supplied separately
Isolation Transformers and Input Line Reactors are available, see pages 46…47.
External EMC Filter is optional (see page 44). Integral filter is included with 240V, single-phase and 380V, three-phase drives.
Integral Keypad included. NEMA/UL Type 4X Remote and Type 1 Handheld Keypads are available (see page 40).
Feed-Through Wiring Design
Communications
Integral RS-485
See page 41 for other options
DIN Rail Mounting (Frames A & B)
Embedded I/O
5 Digital Inputs, 1 Relay Output, 1 Analog Input, 1 PTC Input
Internal Brake IGBT in Frame C drives (see page 42 for Brake Resistors).
Output Reactors, Terminators and Reflected Wave Devices are optional (see pages 40…47).

Additional Information

PowerFlex 4M Technical Data, publication 22F-TD001
PowerFlex 4M User Manual, publication 22F-UM001

Catalog Number Explanation

22F –	D	018	N	1	0	4
	Voltage Rating	Rating	Enclosure		Internal EMC Filter 0 = No 1 = Yes	

Product Selection

100…120V AC, Single-Phase Drives (50/60 Hz, No Brake)

Drive Ratings				IP20, NEMA/UL Type Open	w/Integral "S Type" EMC Filter
		Output Current			
kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.2	0.25	1.6	A	**22F-V1P6N103**	–
0.4	0.5	2.5	A	**22F-V2P5N103**	–
0.75	1	4.5	B	**22F-V4P5N103**	–
1.1	1.5	6	B	**22F-V6P0N103**	–

200…240V AC, Single-Phase Drives (50/60 Hz, No Brake)

Drive Ratings				IP20, NEMA/UL Type Open	w/Integral "S Type" EMC Filter ‡
		Output Current			
kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.2	0.25	1.6	A	**22F-A1P6N103**	**22F-A1P6N113**
0.4	0.5	2.5	A	**22F-A2P5N103**	**22F-A2P5N113**
0.75	1	4.2	A	**22F-A4P2N103**	**22F-A4P2N113**
1.5	2	8	B	**22F-A8P0N103**	**22F-A8P0N113**
2.2	3	11	B	**22F-A011N103**	**22F-A011N113**

‡ This filter is suitable for use with a cable length of up to 5 meters for class A environments and up to 1 meter for class B environments.

200…240V AC, Three-Phase Drives (50/60 Hz)

Drive Ratings				IP20, NEMA/UL Type Open	w/Integral "S Type" EMC Filter
		Output Current			
kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.2	0.25	1.6	A	**22F-B1P6N103**	–
0.4	0.5	2.5	A	**22F-B2P5N103**	–
0.75	1	4.2	A	**22F-B4P2N103**	–
1.5	2	8	A	**22F-B8P0N103**	–
2.2	3	12	B	**22F-B012N103**	–
3.7	5	17.5	B	**22F-B017N103**	–
w/Brake					
5.5	7.5	25	C	**22F-B025N104**	–
7.5	10	33	C	**22F-B033N104**	–

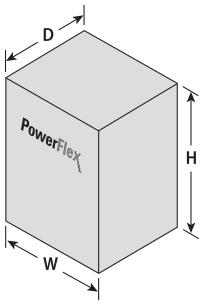
380…480V AC, Three-Phase Drives (50/60 Hz)

Drive Ratings				IP20, NEMA/UL Type Open	w/Integral "S Type" EMC Filter ‡
		Output Current			
kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	1.5	A	**22F-D1P5N103**	**22F-D1P5N113**
0.75	1	2.5	A	**22F-D2P5N103**	**22F-D2P5N113**
1.5	2	4.2	A	**22F-D4P2N103**	**22F-D4P2N113**
2.2	3	6	B	**22F-D6P0N103**	**22F-D6P0N113**
3.7	5	8.7	B	**22F-D8P7N103**	**22F-D8P7N113**
w/Brake					
5.5	7.5	13	C	**22F-D013N104**	**22F-D013N114**
7.5	10	18	C	**22F-D018N104**	**22F-D018N114**
11	15	24	C	**22F-D024N104**	**22F-D024N114**

‡ This filter is suitable for use with a cable length of up to 10 meters for Class A environments.

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP20, NEMA/UL Type Open

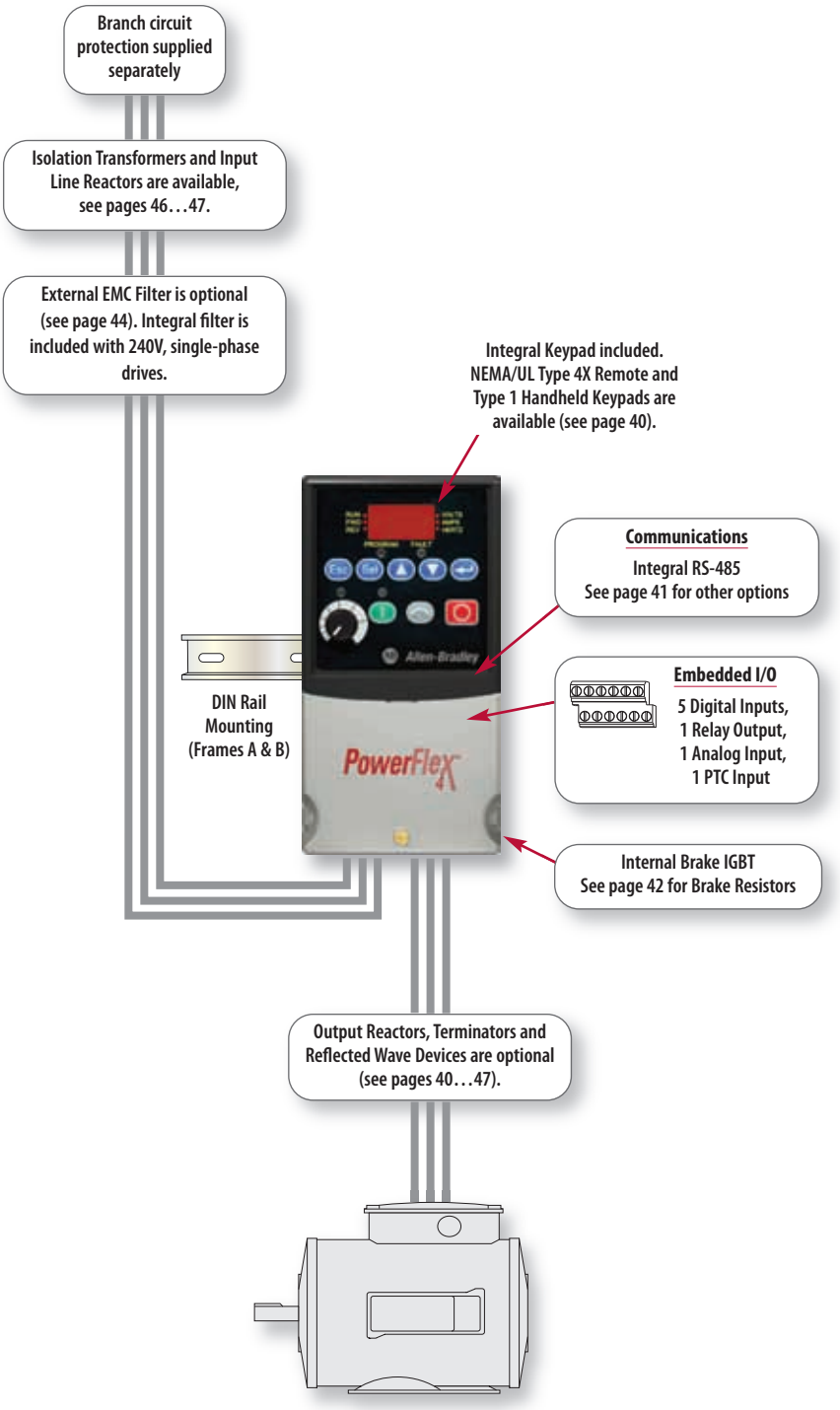
Frame	H	W	D	Weight
A	174.0 (6.85)	72.0 (2.83)	136.0 (5.35)	1.58 (3.5)
B	174.0 (6.85)	100.0 (3.94)	136.0 (5.35)	2.09 (4.6)
C	260.0 (10.24)	130.0 (5.12)	180.0 (7.09)	4.81 (10.6)

PowerFlex 4 AC Drive

Designed to meet global OEM and end-user demands for simplicity, space savings, and cost efficiency, this drive provides intuitive features such as an integral keypad with local potentiometer and control keys that are active right out of the box.

PowerFlex 4 at a glance

Ratings	
100…120V:	0.2…1.1 kW / 0.25…1.5 Hp / 1.5…6 A
200…240V:	0.2…3.7 kW / 0.25…5 Hp / 1.4…17.5 A
380…480V:	0.4…3.7 kW / 0.5…5 Hp / 1.4…8.7 A
Motor Control	V/Hz Control
Enclosures	• IP20, NEMA/UL Type Open • Plate Drive - Front = IP20, NEMA/UL Type Open • Flange Mount - Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X • IP30, NEMA/UL Type 1 (with optional kit)
Certifications	• C-Tick • c-UL, UL • CE
Options	See pages 40… 47


Branch circuit protection supplied separately
Isolation Transformers and Input Line Reactors are available, see pages 46…47.
External EMC Filter is optional (see page 44). Integral filter is included with 240V, single-phase drives.
Integral Keypad included. NEMA/UL Type 4X Remote and Type 1 Handheld Keypads are available (see page 40).
Communications
Integral RS-485
See page 41 for other options
Embedded I/O
5 Digital Inputs,
1 Relay Output,
1 Analog Input,
1 PTC Input
DIN Rail Mounting (Frames A & B)
Internal Brake IGBT
See page 42 for Brake Resistors
Output Reactors, Terminators and Reflected Wave Devices are optional (see pages 40…47).
PowerFlex 4

Additional Information

PowerFlex 4/40 Technical Data, publication 22-TD001
PowerFlex 4 User Manual, publication 22A-UM001

Catalog Number Explanation

22A –	A	1P5	N	1	1	4
	Voltage Rating	Rating	Enclosure		Internal EMC Filter 0 = No 1 = Yes	

Product Selection

100…120V AC, Single-Phase Drives (50/60 Hz, No Filter)

Drive Ratings				IP20/NEMA Type Open	IP20 Plate Drive §	IP20 Flange Mount ★
kW	Hp	Output Current A	Frame Size	Cat. No.	Cat. No.	Cat. No.
0.2	0.25	1.5	A	**22A-V1P5N104**	**22A-V1P5H204**	**22A-V1P5F104**
0.4	0.5	2.3	A	**22A-V2P3N104**	**22A-V2P3H204**	**22A-V2P3F104**
0.75	1	4.5	B	**22A-V4P5N104**	**22A-V4P5H204**	**22A-V4P5F104**
1.1	1.5	6	B	**22A-V6P0N104**	**22A-V6P0H204**	**22A-V6P0F104**

§ Plate Drive – Front = IP20, NEMA/UL Type Open.
★ Flange Mount – Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.

200…240V AC, Single-Phase Drives (50/60 Hz, No Brake)

Drive Ratings				IP20/NEMA Type Open	IP20 Plate Drive §	IP20 Flange Mount ★
kW	Hp	Output Current A	Frame Size	Cat. No.	Cat. No.	Cat. No.
w/Integral "S Type" EMC Filter ‡						
0.2	0.25	1.4	A	**22A-A1P4N113**	–	–
0.4	0.5	2.1	A	**22A-A2P1N113**	–	–
0.75	1	3.6	A	**22A-A3P6N113**	–	–
1.5	2	6.8	B	**22A-A6P8N113**	–	–
2.2	3	9.6	B	**22A-A9P6N113**	–	–
No Filter						
0.2	0.25	1.4	A	**22A-A1P4N103**	–	–
0.4	0.5	2.1	A	**22A-A2P1N103**	–	–
0.75	1	3.6	A	**22A-A3P6N103**	–	–
1.5	2	6.8	B	**22A-A6P8N103**	–	–
2.2	3	9.6	B	**22A-A9P6N103**	–	–

§ Plate Drive – Front = IP20, NEMA/UL Type Open.
★ Flange Mount – Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.
‡ This filter is suitable for use with a cable length of up to 10 meters for Class A and 1 meter for Class B environments.

200…240V AC, Single-Phase Drives (50/60 Hz)

Drive Ratings				IP20/NEMA Type Open	IP20 Plate Drive §	IP20 Flange Mount ★
		Output Current				
kW	Hp	A	Frame Size	Cat. No.	Cat. No.	Cat. No.
w/Integral "S Type" EMC Filter ‡						
0.2	0.25	1.5	A	**22A-A1P5N114**	–	–
0.4	0.5	2.3	A	**22A-A2P3N114**	–	–
0.75	1	4.5	A	**22A-A4P5N114**	–	–
1.5	2	8	B	**22A-A8P0N114**	–	–
No Filter						
0.2	0.25	1.5	A	**22A-A1P5N104**	**22A-A1P5H204**	**22A-A1P5F104**
0.4	0.5	2.3	A	**22A-A2P3N104**	**22A-A2P3H204**	**22A-A2P3F104**
0.75	1	4.5	A	**22A-A4P5N104**	**22A-A4P5H204**	**22A-A4P5F104**
1.5	2	8	B	**22A-A8P0N104**	**22A-A8P0H204**	**22A-A8P0F104**

§ Plate Drive – Front = IP20, NEMA/UL Type Open.

★ Flange Mount – Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.

‡ This filter is suitable for use with a cable length of up to 10 meters for Class A and 1 meter for Class B environments.

200…240V AC, Three-Phase Drives (50/60 Hz, No Filter)

Drive Ratings				IP20/NEMA Type Open	IP20 Plate Drive §	IP20 Flange Mount ★
		Output Current				
kW	Hp	A	Frame Size	Cat. No.	Cat. No.	Cat. No.
0.2	0.25	1.5	A	**22A-B1P5N104**	**22A-B1P5H204**	**22A-B1P5F104**
0.4	0.5	2.3	A	**22A-B2P3N104**	**22A-B2P3H204**	**22A-B2P3F104**
0.75	1	4.5	A	**22A-B4P5N104**	**22A-B4P5H204**	**22A-B4P5F104**
1.5	2	8	A	**22A-B8P0N104**	**22A-B8P0H204**	**22A-B8P0F104**
2.2	3	12	B	**22A-B012N104**	**22A-B012H204**	**22A-B012F104**
3.7	5	17.5	B	**22A-B017N104**	**22A-B017H204**	**22A-B017F104**

§ Plate Drive – Front = IP20, NEMA/UL Type Open.

★ Flange Mount – Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.

380…480V AC, Three-Phase Drives (50/60 Hz, No Filter)

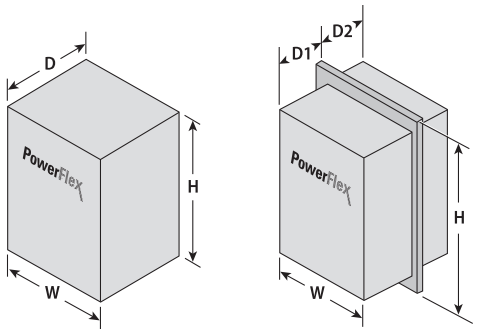
Drive Ratings				IP20/NEMA Type Open	IP20 Plate Drive §	IP20 Flange Mount ★
		Output Current				
kW	Hp	A	Frame Size	Cat. No.	Cat. No.	Cat. No.
0.4	0.5	1.4	A	**22A-D1P4N104**	**22A-D1P4H204**	**22A-D1P4F104**
0.75	1	2.3	A	**22A-D2P3N104**	**22A-D2P3H204**	**22A-D2P3F104**
1.5	2	4	A	**22A-D4P0N104**	**22A-D4P0H204**	**22A-D4P0F104**
2.2	3	6	B	**22A-D6P0N104**	**22A-D6P0H204**	**22A-D6P0F104**
3.7	5	8.7	B	**22A-D8P7N104**	**22A-D8P7H204**	**22A-D8P7F104**

§ Plate Drive – Front = IP20, NEMA/UL Type Open.

★ Flange Mount – Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP20, NEMA/UL Type Open

Frame	H	W	D	Weight
A	152.0 (5.98) 185.0 (7.28) ★	80.0 (3.15)	136.0 (5.35)	1.41 (3.1)
B	180.0 (7.09) 213.0 (8.39) ★	100.0 (3.94)	136.0 (5.35)	2.22 (4.9)

★ Overall height of drive with IP30, NEMA 1/UL Type 1 option kit installed.

Plate Drive

Frame	H	W	D	Weight
A	175.0 (6.89)	104.8 (4.13)	94.0 (3.70)	0.91 (2.0)
B	125.0 (4.92)	204.0 (8.03)	97.5 (3.84)	1.67 (3.7)

Flange Mount

Frame	H	W	D1	D2	Weight
A	210.0 (8.27)	175.0 (6.89)	92.8 (3.65)	54.7 (2.15)	2.49 (5.5)
B	250.0 (9.84)	244.0 (9.61)	94.3 (3.71)	63.1 (2.48)	4.53 (10.0)

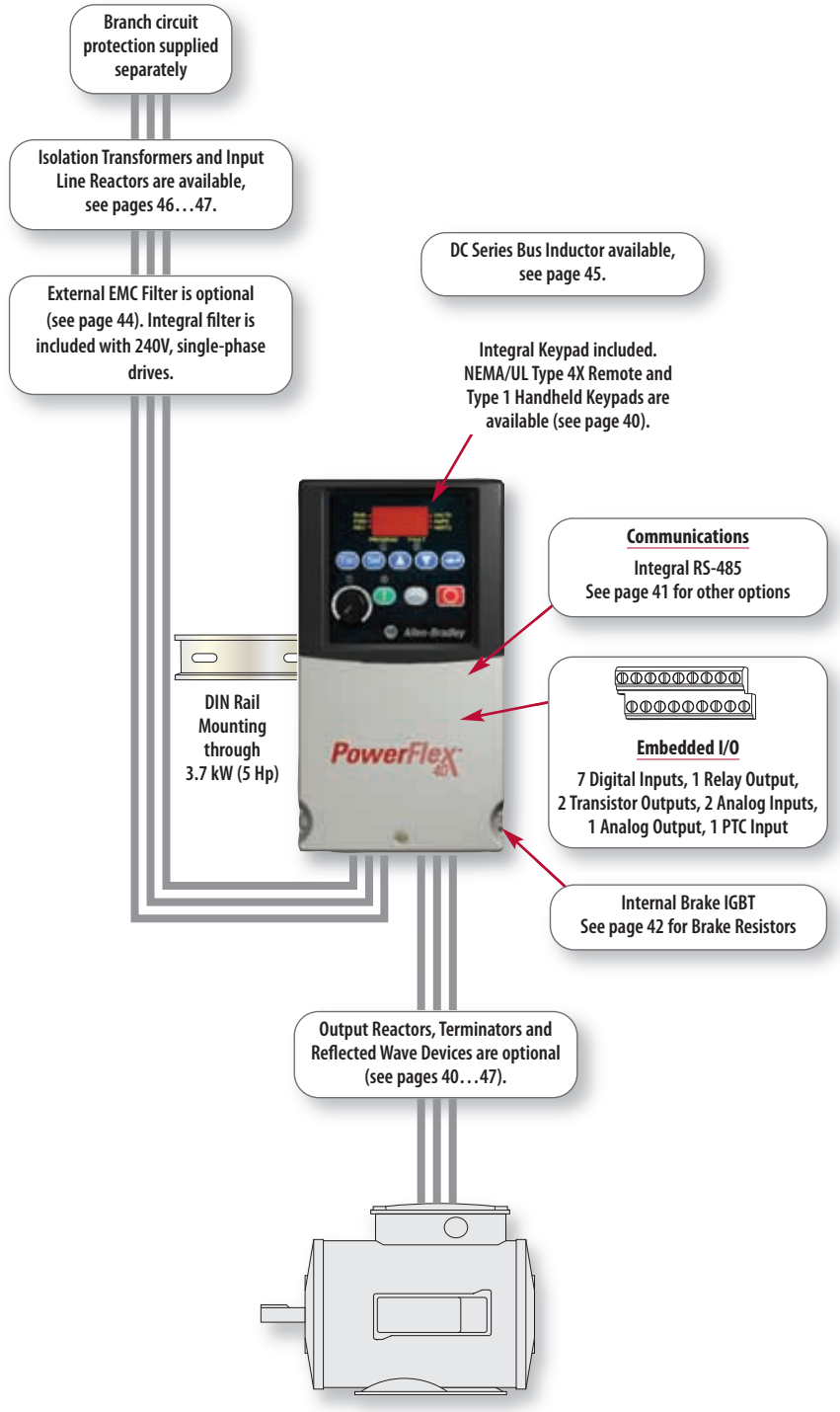
PowerFlex 40 AC Drive

The PowerFlex 40 AC drive gives OEMs, machine builders and end users performance-enhancing motor control in an easy to-use, compact package. The PowerFlex 40 features sensorless vector control to meet low speed torque demands helping to improve application performance.

With flexible packaging options and an uncomplicated programming structure, this drive can be quickly and easily installed and configured for a variety of applications.

PowerFlex 40 AC Drive at a glance

Ratings	
100…120V:	0.4…1.1 kW / 0.5…1.5 Hp / 2.3…6 A
200…240V:	0.4…7.5 kW / 0.5…10 Hp / 2.3…33 A
380…480V:	0.4…11 kW / 0.5…15 Hp / 1.4…24 A
500…600V:	0.75…11 kW / 1…15 Hp / 1.7…19 A
Motor Control	• V/Hz Control • Sensorless Vector Control
Enclosures	• IP20, NEMA/UL Type Open • Plate Drive - Front = IP20, NEMA/UL Type Open • Flange Mount - Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X • IP66, NEMA/UL Type 4X • IP30, NEMA/UL Type 1 (with optional kit)
Certifications	• C-Tick • c-UL, UL • CE
Options	See pages 40… 47


Branch circuit protection supplied separately
Isolation Transformers and Input Line Reactors are available, see pages 46…47.
External EMC Filter is optional (see page 44). Integral filter is included with 240V, single-phase drives.
DC Series Bus Inductor available, see page 45.
Integral Keypad included. NEMA/UL Type 4X Remote and Type 1 Handheld Keypads are available (see page 40).
Communications
Integral RS-485
See page 41 for other options
DIN Rail Mounting through 3.7 kW (5 Hp)
PowerFlex 40
Embedded I/O
7 Digital Inputs, 1 Relay Output, 2 Transistor Outputs, 2 Analog Inputs, 1 Analog Output, 1 PTC Input
Internal Brake IGBT
See page 42 for Brake Resistors
Output Reactors, Terminators and Reflected Wave Devices are optional (see pages 40…47).

Additional Information

PowerFlex 4/40 Technical Data, publication 22-TD001
PowerFlex 40 User Manual, publication 22B-UM001

Catalog Number Explanation

22B –	A	2P3	N	1	1	4
	Voltage Rating	Rating	Enclosure		Internal EMC Filter 0 = No 1 = Yes	

Product Selection

100…120V AC, Single-Phase Drives (50/60 Hz, No Filter)

Drive Ratings				IP20, NEMA/UL Type Open	IP20 Plate Drive §	IP20 Flange Mount ★	IP66, NEMA/UL Type 4X
kW	Hp	Output Current A	Frame Size	Cat. No.	Cat. No.	Cat. No.	Cat. No.
0.4	0.5	2.3	B	**22B-V2P3N104**	**22B-V2P3H204**	**22B-V2P3F104**	**22B-V2P3C104**
0.75	1	5	B	**22B-V5P0N104**	**22B-V5P0H204**	**22B-V5P0F104**	**22B-V5P0C104**
1.1	1.5	6	B	**22B-V6P0N104**	**22B-V6P0H204**	**22B-V6P0F104**	**22B-V6P0C104**

§ Plate Drive – Front = IP20, NEMA/UL Type Open.
★ Flange Mount – Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.

200…240V AC, Single-Phase Drives (50/60 Hz)

Drive Ratings				IP20, NEMA/UL Type Open	IP20 Plate Drive §	IP20 Flange Mount ★	IP66, NEMA/UL Type 4X
kW	Hp	Output Current A	Frame Size	Cat. No.	Cat. No.	Cat. No.	Cat. No.
w/Integral "S Type" EMC Filter ‡							
0.4	0.5	2.3	B	**22B-A2P3N114**	–	–	–
0.75	1	5	B	**22B-A5P0N114**	–	–	–
1.5	2	8	B	**22B-A8P0N114**	–	–	–
2.2	3	12	C	**22B-A012N114**	–	–	–
No Filter							
0.4	0.5	2.3	B	**22B-A2P3N104**	**22B-A2P3H204**	**22B-A2P3F104**	**22B-A2P3C104**
0.75	1	5	B	**22B-A5P0N104**	**22B-A5P0H204**	**22B-A5P0F104**	**22B-A5P0C104**
1.5	2	8	B	**22B-A8P0N104**	**22B-A8P0H204**	**22B-A8P0F104**	**22B-A8P0C104**
2.2	3	12	C	**22B-A012N104**	**22B-A012H204**	**22B-A012F104**	–

§ Plate Drive – Front = IP20, NEMA/UL Type Open.
★ Flange Mount – Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.
‡ This filter is suitable for use with a cable length of up to 10 meters for Class A and 1 meter for Class B environments.

200…240V AC, Three-Phase Drives (50/60 Hz, No Filter)

Drive Ratings				IP20, NEMA/UL Type Open	IP20 Plate Drive §	IP20 Flange Mount ★	IP66, NEMA/UL Type 4X
		Output Current					
kW	Hp	A	Frame Size	Cat. No.	Cat. No.	Cat. No.	Cat. No.
0.4	0.5	2.3	B	**22B-B2P3N104**	**22B-B2P3H204**	**22B-B2P3F104**	**22B-B2P3C104**
0.75	1	5	B	**22B-B5P0N104**	**22B-B5P0H204**	**22B-B5P0F104**	**22B-B5P0C104**
1.5	2	8	B	**22B-B8P0N104**	**22B-B8P0H204**	**22B-B8P0F104**	**22B-B8P0C104**
2.2	3	12	B	**22B-B012N104**	**22B-B012H204**	**22B-B012F104**	**22B-B012C104**
3.7	5	17.5	B	**22B-B017N104**	**22B-B017H204**	**22B-B017F104**	**22B-B017C104**
5.5	7.5	24	C	**22B-B024N104**	**22B-B024H204**	**22B-B024F104**	–
7.5	10	33	C	**22B-B033N104**	**22B-B033H204**	**22B-B033F104**	–

§ Plate Drive – Front = IP20, NEMA/UL Type Open.

★ Flange Mount – Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.

380…480V AC, Three-Phase Drives (50/60 Hz, No Filter)

Drive Ratings				IP20, NEMA/UL Type Open	IP20 Plate Drive §	IP20 Flange Mount ★	IP66, NEMA/UL Type 4X
		Output Current					
kW	Hp	A	Frame Size	Cat. No.	Cat. No.	Cat. No.	Cat. No.
0.4	0.5	1.4	B	**22B-D1P4N104**	**22B-D1P4H204**	**22B-D1P4F104**	**22B-D1P4C104**
0.75	1	2.3	B	**22B-D2P3N104**	**22B-D2P3H204**	**22B-D2P3F104**	**22B-D2P3C104**
1.5	2	4	B	**22B-D4P0N104**	**22B-D4P0H204**	**22B-D4P0F104**	**22B-D4P0C104**
2.2	3	6	B	**22B-D6P0N104**	**22B-D6P0H204**	**22B-D6P0F104**	**22B-D6P0C104**
4	5	10.5	B	**22B-D010N104**	**22B-D010H204**	**22B-D010F104**	**22B-D010C104**
5.5	7.5	12	C	**22B-D012N104**	**22B-D012H204**	**22B-D012F104**	–
7.5	10	17	C	**22B-D017N104**	**22B-D017H204**	**22B-D017F104**	–
11	15	24	C	**22B-D024N104**	**22B-D024H204** ♣	**22B-D024F104** ♣	–

§ Plate Drive – Front = IP20, NEMA/UL Type Open.

★ Flange Mount – Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.

♣ Requires use of external DC Bus inductor or AC Line Reactor.

500…600V AC, Three-Phase Drives (50/60 Hz, No Filter)

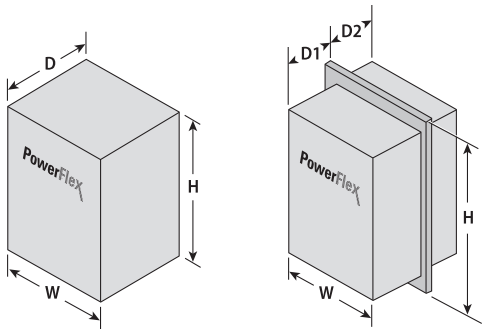
Drive Ratings				IP20, NEMA/UL Type Open	IP20 Plate Drive §	IP20 Flange Mount ★	IP66, NEMA/UL Type 4X
		Output Current					
kW	Hp	A	Frame Size	Cat. No.	Cat. No.	Cat. No.	Cat. No.
0.75	1	1.7	B	**22B-E1P7N104**	**22B-E1P7H204**	**22B-E1P7F104**	**22B-E1P7C104**
1.5	2	3	B	**22B-E3P0N104**	**22B-E3P0H204**	**22B-E3P0F104**	**22B-E3P0C104**
2.2	3	4.2	B	**22B-E4P2N104**	**22B-E4P2H204**	**22B-E4P2F104**	**22B-E4P2C104**
4	5	6.6	B	**22B-E6P6N104**	**22B-E6P6H204**	**22B-E6P6F104**	**22B-E6P6C104**
5.5	7.5	9.9	C	**22B-E9P9N104**	**22B-E9P9H204**	**22B-E9P9F104**	–
7.5	10	12	C	**22B-E012N104**	**22B-E012H204**	**22B-E012F104**	–
11	15	19	C	**22B-E019N104**	**22B-E019H204**	**22B-E019F104**	–

§ Plate Drive – Front = IP20, NEMA/UL Type Open.

★ Flange Mount – Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP20, NEMA/UL Type Open

Frame	H	W	D	Weight
B	180.0 (7.09) 213.0 (8.39) ★ 244.0 (9.61) ‡	100.0 (3.94)	136.0 (5.35) - 161.0 (6.33) ‡	2.22 (4.9)
C	260.0 (10.20) 320.0 (12.60) ★ 320.0 (12.60) ‡	130.0 (5.10)	180.0 (7.10) - 205.0 (8.08) ‡	4.31 (9.5)

★ Drive with IP30, NEMA 1/UL Type 1 option kit installed.
‡ Drive with IP30, NEMA 1/UL Type 1 option kit and Communication Option (22-JBCx) installed.

Plate Drive

Frame	H	W	D	Weight
B	125.0 (4.92)	204.0 (8.03)	97.5 (3.84)	1.68 (3.7)
C	284.0 (11.18)	155.0 (6.10)	108.0 (4.25)	2.59 (5.7)

Flange Mount

Frame	H	W	D1	D2	Weight
B	250.0 (9.84)	244.0 (9.61)	94.3 (3.71)	63.1 (2.48)	4.53 (10.0)
C	325.0 (12.80)	300.0 (11.81)	105.8 (4.17)	138.2 (5.44)	11.93 (26.3)

IP66, NEMA/UL Type 4X/12

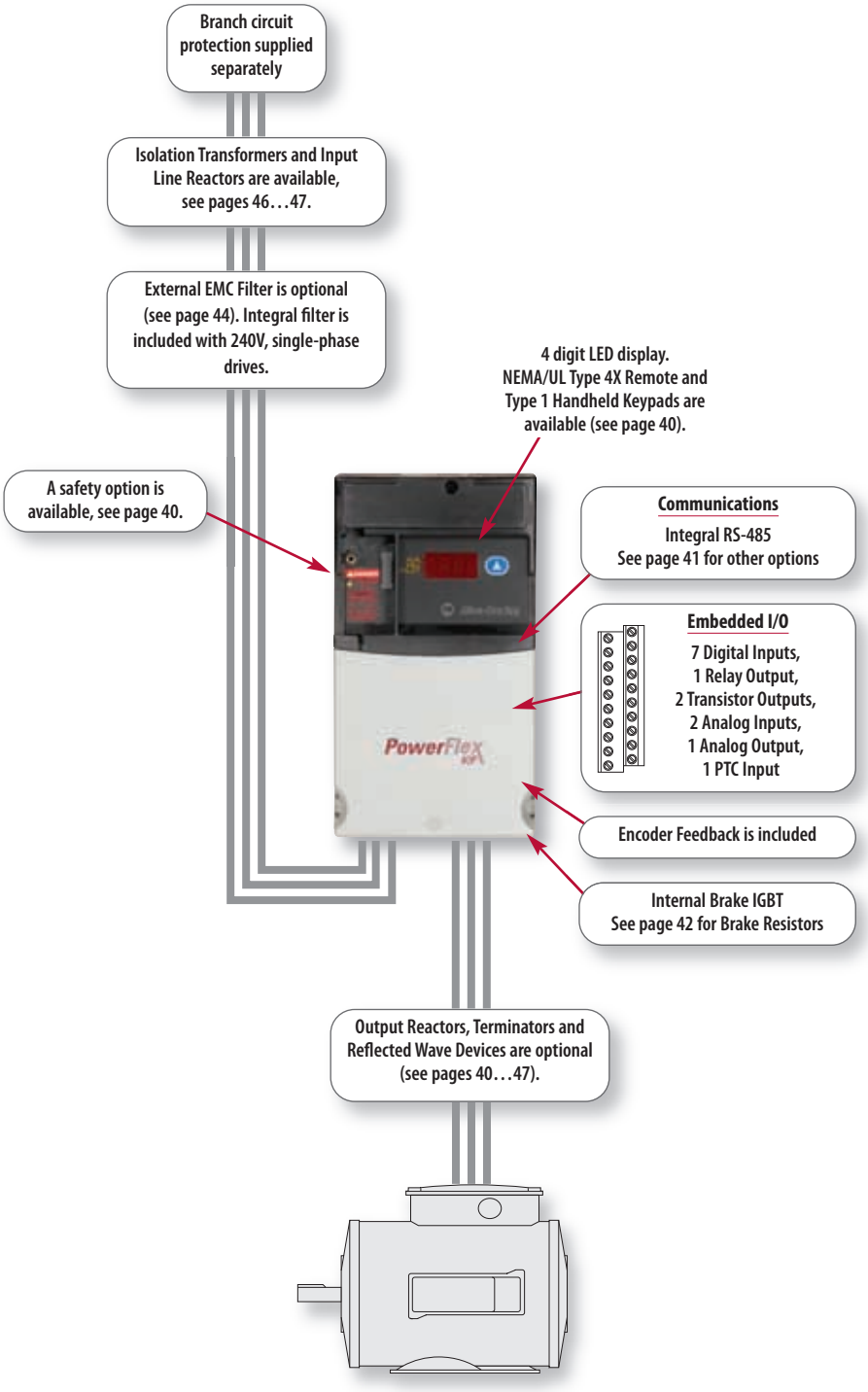
Frame	H	W	D	Weight
B	270.0 (10.63)	165.0 (6.50)	198.0 (7.80)	5.30 (11.7)

PowerFlex 40P AC Drive

The PowerFlex 40P AC drive addresses user needs for closed loop control with an option for Category 3 Safe Torque-off in a compact and cost effective design. Based on the popular PowerFlex 40 this drive is designed to meet global OEM and end-user demands for flexibility, space savings and ease of use. This drive is a cost-effective alternative for speed or basic position control of applications such as diverters, smart conveyors, packaging machines, palletizers, drafting machines, ring spinning machines and synthetic fiber spinning machines and shares common options and accessories with the PowerFlex 40.

PowerFlex 40P at a glance

Ratings	
200…240V:	0.4…7.5 kW / 0.5…10 Hp / 2.3…33 A
380…480V:	0.4…11 kW / 0.5…15 Hp / 1.4…24 A
500…600V:	0.75…11 kW / 1…15 Hp / 1.7…19 A
Motor Control	• V/Hz Control • Sensorless Vector Control
Enclosures	• IP20, NEMA/UL Type Open • Plate Drive - Front = IP20, NEMA/UL Type Open • Flange Mount - Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X • IP30, NEMA/UL Type 1 (with optional kit)
Safety	DriveGuard Safe Torque-Off / EN 954-1 Cat. 3
Additional Features	• Speed control with and without encoder feedback • Fiber application specific features • StepLogic allows operation as an independent position controller
Certifications	• C-Tick • c-UL, UL • CE (240 and 480V Ratings) • TÜV FS ISO/EN13849-1 (EN954-1) with Safe Torque-Off option
Options	See pages 40… 47


Branch circuit protection supplied separately
Isolation Transformers and Input Line Reactors are available, see pages 46…47.
External EMC Filter is optional (see page 44). Integral filter is included with 240V, single-phase drives.
4 digit LED display. NEMA/UL Type 4X Remote and Type 1 Handheld Keypads are available (see page 40).
A safety option is available, see page 40.
Communications
Integral RS-485
See page 41 for other options
Embedded I/O
7 Digital Inputs,
1 Relay Output,
2 Transistor Outputs,
2 Analog Inputs,
1 Analog Output,
1 PTC Input
Encoder Feedback is included
Internal Brake IGBT
See page 42 for Brake Resistors
Output Reactors, Terminators and Reflected Wave Devices are optional (see pages 40…47).

Additional Information

PowerFlex 40P Technical Data, publication 22D-TD001
PowerFlex 40P User Manual, publication 22D-UM001

Catalog Number Explanation

22D –	B	2P3	N	1	0	4
	Voltage Rating	Rating	Enclosure			

Product Selection

200…240V AC, Three-Phase Drives (50/60 Hz, No Filter)

Drive Ratings				IP20/NEMA Type Open	IP20 Plate Drive §	IP20 Flange Mount ★
		Output Current				
kW	Hp	A	Frame Size	Cat. No.	Cat. No.	Cat. No.
0.4	0.5	2.3	B	**22D-B2P3N104**	**22D-B2P3H204**	**22D-B2P3F104**
0.75	1	5	B	**22D-B5P0N104**	**22D-B5P0H204**	**22D-B5P0F104**
1.5	2	8	B	**22D-B8P0N104**	**22D-B8P0H204**	**22D-B8P0F104**
2.2	3	12	B	**22D-B012N104**	**22D-B012H204**	**22D-B012F104**
3.7	5	17.5	B	**22D-B017N104**	**22D-B017H204**	**22D-B017F104**
5.5	7.5	24	C	**22D-B024N104**	**22D-B024H204**	**22D-B024F104**
7.5	10	33	C	**22D-B033N104**	**22D-B033H204**	**22D-B033F104**

§ Plate Drive – Front = IP20, NEMA/UL Type Open.

★ Flange Mount – Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.

380…480V AC, Three-Phase Drives (50/60 Hz, No Filter)

Drive Ratings				IP20/NEMA Type Open	IP20 Plate Drive §	IP20 Flange Mount ★
		Output Current				
kW	Hp	A	Frame Size	Cat. No.	Cat. No.	Cat. No.
0.4	0.5	1.4	B	**22D-D1P4N104**	**22D-D1P4H204**	**22D-D1P4F104**
0.75	1	2.3	B	**22D-D2P3N104**	**22D-D2P3H204**	**22D-D2P3F104**
1.5	2	4	B	**22D-D4P0N104**	**22D-D4P0H204**	**22D-D4P0F104**
2.2	3	6	B	**22D-D6P0N104**	**22D-D6P0H204**	**22D-D6P0F104**
4	5	10.5	B	**22D-D010N104**	**22D-D010H204**	**22D-D010F104**
5.5	7.5	12	C	**22D-D012N104**	**22D-D012H204**	**22D-D012F104**
7.5	10	17	C	**22D-D017N104**	**22D-D017H204**	**22D-D017F104**
11	15	24	C	**22D-D024N104**	**22D-D024H204**	**22D-D024F104**

§ Plate Drive – Front = IP20, NEMA/UL Type Open.

★ Flange Mount – Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.

500…600V AC, Three-Phase Drives (50/60 Hz, No Filter)

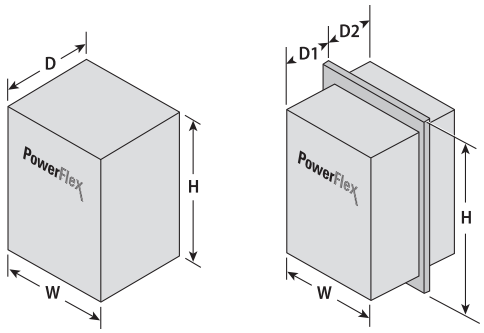
Drive Ratings				IP20/NEMA Type Open	IP20 Plate Drive §	IP20 Flange Mount ★
		Output Current				
kW	Hp	A	Frame Size	Cat. No.	Cat. No.	Cat. No.
0.75	1	1.7	B	**22D-E1P7N104**	**22D-E1P7H204**	**22D-E1P7F104**
1.5	2	3	B	**22D-E3P0N104**	**22D-E3P0H204**	**22D-E3P0F104**
2.2	3	4.2	B	**22D-E4P2N104**	**22D-E4P2H204**	**22D-E4P2F104**
4	5	6.6	B	**22D-E6P6N104**	**22D-E6P6H204**	**22D-E6P6F104**
5.5	7.5	9.9	C	**22D-E9P9N104**	**22D-E9P9H204**	**22D-E9P9F104**
7.5	10	12	C	**22D-E012N104**	**22D-E012H204**	**22D-E012F104**
11	15	19	C	**22D-E019N104**	**22D-E019H204**	**22D-E019F104**

§ Plate Drive – Front = IP20, NEMA/UL Type Open.

★ Flange Mount – Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP20, NEMA/UL Type Open

Frame	H	W	D	Weight
B	180.0 (7.09) 213.0 (8.39) ★ 244.0 (9.61) ‡	100.0 (3.94)	136.0 (5.35) - 161.0 (6.34) ‡	2.22 (4.9)
C	260.0 (10.20) 320.0 (12.60) ★ 320.0 (12.60) ‡	130.0 (5.10)	180.0 (7.10) - 205.0 (8.07) ‡	4.31 (9.5)

★ Drive with IP30, NEMA 1/UL Type 1 option kit installed.
‡ Drive with IP30, NEMA 1/UL Type 1 option kit and Communication Option (22-JBCx) installed.

Plate Drive

Frame	H	W	D	Weight
B	125.0 (4.92)	204.0 (8.03)	97.5 (3.84)	1.68 (3.7)
C	284.0 (11.18)	155.0 (6.10)	108.0 (4.25)	2.59 (5.7)

Flange Mount

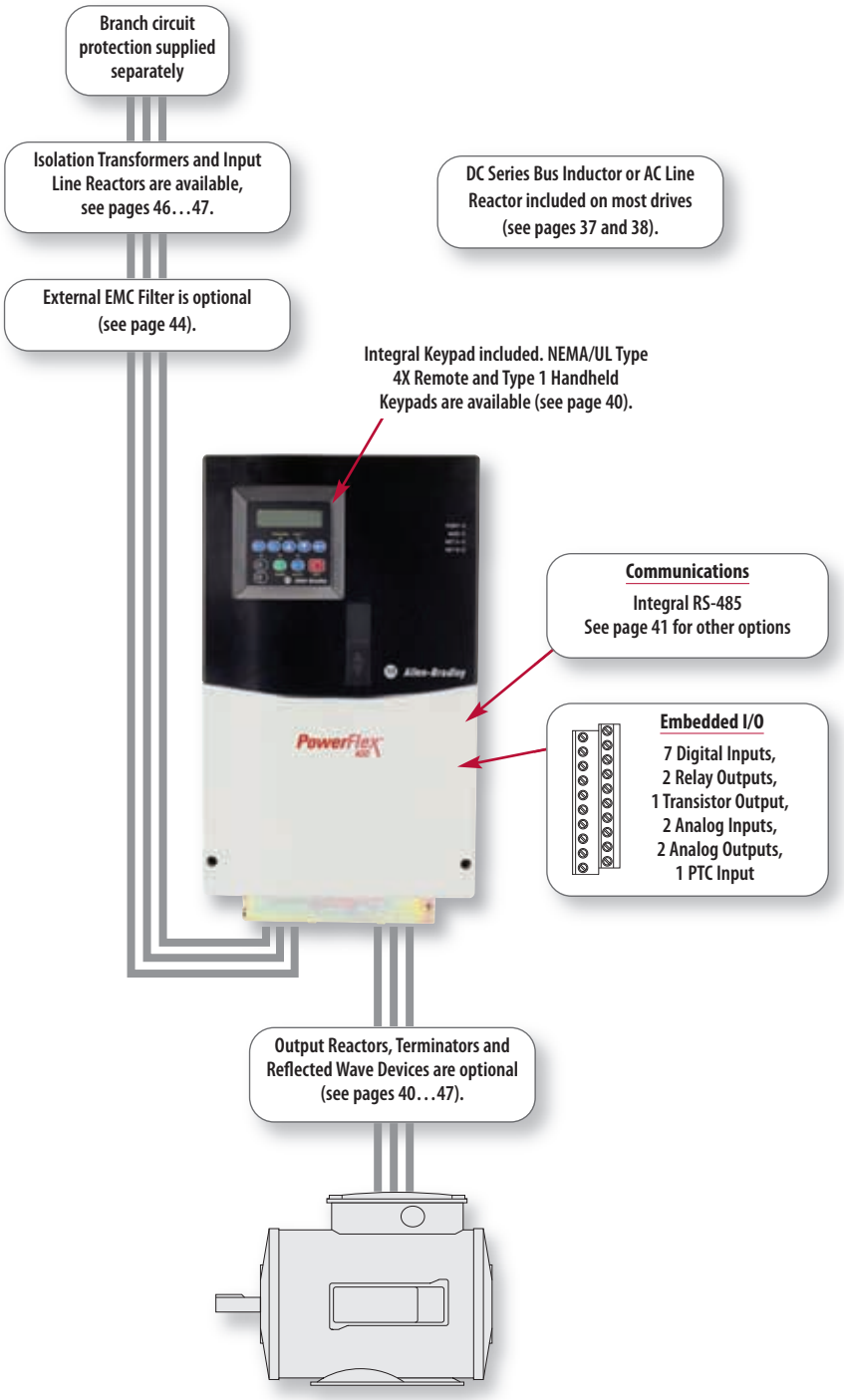
Frame	H	W	D1	D2	Weight
B	250.0 (9.84)	244.0 (9.61)	94.3 (3.71)	63.1 (2.48)	4.53 (10.0)
C	325.0 (12.80)	300.0 (11.81)	105.8 (4.17)	138.2 (5.44)	11.93 (26.3)

PowerFlex 400 AC Drive

Providing users with easy installation and ideal for mechanical fan and pump systems, the PowerFlex 400 AC drive offers a wide range of built-in features allowing for seamless HVAC building system integration. The PowerFlex 400 is designed to meet global OEM, contractor and end-user demands for flexibility, space savings and ease-of-use.

PowerFlex 400 at a glance

Ratings	
200…240V:	2.2…37 kW / 3…50 Hp / 12…145 A
380…480V:	2.2…250 kW / 3…350 Hp / 6…460 A
Motor Control	V/Hz Control
Enclosures	• IP20, NEMA/UL Type Open • Flange Mount - Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X • IP30, NEMA/UL Type 1 (with optional kit)
Additional Features	PID/ PIP for fan and pump applications
Certifications	• C-Tick • c-UL, UL • CE • IEC (Designed to Meet) • UL508C Plenum Rating
Options	See pages 40… 47


Branch circuit protection supplied separately
Isolation Transformers and Input Line Reactors are available, see pages 46…47.
DC Series Bus Inductor or AC Line Reactor included on most drives (see pages 37 and 38).
External EMC Filter is optional (see page 44).
Integral Keypad included. NEMA/UL Type 4X Remote and Type 1 Handheld Keypads are available (see page 40).
Communications
Integral RS-485
See page 41 for other options
Embedded I/O
7 Digital Inputs,
2 Relay Outputs,
1 Transistor Output,
2 Analog Inputs,
2 Analog Outputs,
1 PTC Input
Output Reactors, Terminators and Reflected Wave Devices are optional (see pages 40…47).

Additional Information

PowerFlex 400 Technical Data, publication 22C-TD001
PowerFlex 400 User Manual, publication 22C-UM001

Catalog Number Explanation

22C –	D	038	A	1	0	3
	Voltage Rating	Rating	Enclosure			

Product Selection

200...240V AC, Three-Phase Drives

Drive Ratings				Rating	Panel Mount	Flange Mount Δ
		Output Current ★				
kW	Hp	A	Frame Size		Cat. No.	Cat. No.
2.2	3	12	C	IP20, NEMA/UL Open Type ‡	**22C-B012N103** ♦	**22C-B012F103** ♦
3.7	5	17.5	C	IP20, NEMA/UL Open Type ‡	**22C-B017N103** ♦	**22C-B017F103** ♦
5.5	7.5	24	C	IP20, NEMA/UL Open Type ‡	**22C-B024N103** ♦	**22C-B024F103** ♦
7.5	10	33	C	IP20, NEMA/UL Open Type ‡	**22C-B033N103** ♦	**22C-B033F103** ♦
11	15	49	D	IP30, NEMA/UL Type 1	**22C-B049A103**	–
15	20	65	D	IP30, NEMA/UL Type 1	**22C-B065A103**	–
18.5	25	75	D	IP30, NEMA/UL Type 1	**22C-B075A103**	–
22	30	90	D	IP30, NEMA/UL Type 1	**22C-B090A103**	–
30	40	120	E	IP30, NEMA/UL Type 1	**22C-B120A103**	–
37	50	145	E	IP30, NEMA/UL Type 1	**22C-B145A103**	–

★ Drive terminals are sized according to UL. Depending on operating ambient and wire used, some local or national codes may require a larger wire size than what the power terminals can accept. Multiple conductors, 90 °C wire, and/or lugs may be required. Refer to the PowerFlex 400 *User Manual* for details on terminal block wire ranges.

‡ IP30, NEMA/UL Type 1 can be achieved for panel mount drives with top cover and optional conduit box kit installed. See page 41 for a field installed conversion kit.

Δ Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.

♦ A DC bus inductor is not included. See page 45 for available inductors.

380...480V AC, Three-Phase Drives

Drive Ratings					Panel Mount	Flange Mount Δ
		Output Current ★				
kW	Hp	A	Frame Size	Rating	Cat. No.	Cat. No.
2.2	3	6	C	IP20, NEMA/UL Open Type ‡	**22C-D6P0N103** ♦	**22C-D6P0F103** ♦
4	5	10.5	C	IP20, NEMA/UL Open Type ‡	**22C-D010N103** ♦	**22C-D010F103** ♦
5.5	7.5	12	C	IP20, NEMA/UL Open Type ‡	**22C-D012N103** ♦	**22C-D012F103** ♦
7.5	10	17	C	IP20, NEMA/UL Open Type ‡	**22C-D017N103** ♦	**22C-D017F103** ♦
11	15	22	C	IP20, NEMA/UL Open Type	**22C-D022N103**	**22C-D022F103** §
15	20	30	C	IP20, NEMA/UL Open Type	**22C-D030N103**	**22C-D030F103** §
18.5	25	38	D	IP30, NEMA/UL Type 1	**22C-D038A103**	–
22	30	45.5	D	IP30, NEMA/UL Type 1	**22C-D045A103**	–
30	40	60	D	IP30, NEMA/UL Type 1	**22C-D060A103**	–
37	50	72	E	IP30, NEMA/UL Type 1	**22C-D072A103**	–
45	60	88	E	IP30, NEMA/UL Type 1	**22C-D088A103**	–
55	75	105	E	IP30, NEMA/UL Type 1	**22C-D105A103**	–
75	100	142	E	IP30, NEMA/UL Type 1	**22C-D142A103**	–
90	125	170	F	IP30, NEMA/UL Type 1	**22C-D170A103**	–
110	150	208	F	IP30, NEMA/UL Type 1	**22C-D208A103**	–
132	200	260	G	IP30, NEMA/UL Type 1	**22C-D260A103**	–
160	250	310	G	IP30, NEMA/UL Type 1	**22C-D310A103**	–
200	300	370	H	IP30, NEMA/UL Type 1	**22C-D370A103** ♣	–
250	350	460	H	IP30, NEMA/UL Type 1	**22C-D460A103** ♣	–

★ Drive terminals are sized according to UL. Depending on operating ambient and wire used, some local or national codes may require a larger wire size than what the power terminals can accept. Multiple conductors, 90 °C wire, and/or lugs may be required. Refer to the PowerFlex 400 *User Manual* for details on terminal block wire ranges.

‡ IP30, NEMA/UL Type 1 can be achieved for panel mount drives with top cover and optional conduit box kit installed. See page 41 for a field installed conversion kit.

§ 11 and 15 kW (15 and 20 Hp) Frame C flange mount drives require an external DC series bus inductor.

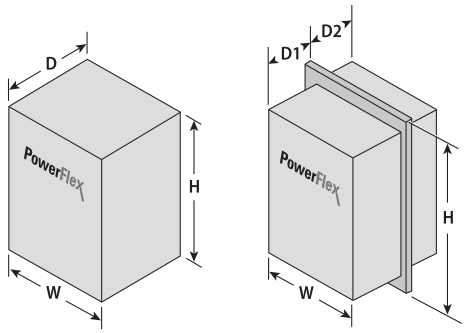
♣ 200 and 250 kW (300 and 350 Hp) ratings include an internal AC line reactor (not a DC bus inductor).

Δ Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.

♦ A DC bus inductor is not included. See page 45 for available inductors.

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



Panel Mount

Frame	H	W	D	Weight ‡
C	260.0 (10.20) 320.0 (12.60) ★	130.0 (5.10)	180.0 (7.10)	7.49 (16.5)
D	436.2 (17.17)	250.0 (9.84)	206.1 (8.11)	15.60 (34.4)
E	605.5 (23.84)	370.0 (14.57)	259.2 (10.21)	51.20 (112.9)
F	850.0 (33.46)	425.0 (16.73)	280.0 (11.02)	88.00 (194.0)
G	892.0 (35.12)	425.0 (16.73)	264.0 (10.39)	106.00 (233.7)
H	1363.8 (53.69)	529.2 (20.83)	358.6 (14.12)	177.00 (390.2)

★ Drive with IP30, NEMA 1/UL Type 1 option kit installed.
‡ Weights are approximate. Refer to the PowerFlex 400 User Manual for detailed weight information.

Flange Mount

Frame	H	W	D1	D2	Weight ‡
C	325.0 (12.80)	300.0 (11.81)	105.8 (4.17)	138.2 (5.44)	3.85 (8.5)

‡ Weights are approximate. Refer to the PowerFlex 400 User Manual for detailed weight information.

PowerFlex 4-Class Options

Human Interface Modules and Accessories

Description	Cat. No.	Used with PowerFlex Drive				
		4M	4	40	40P	400
Remote (Panel Mount) LCD Display, Digital Speed Control, CopyCat Capable. Includes 2.0 meter cable. IP66, NEMA Type 4X/12 - Indoor Use Only.	**22-HIM-C2S ♣**	✓	✓	✓	✓	✓
Remote Handheld, LCD Display, Full Numeric Keypad, Digital Speed Control, CopyCat Capable. Includes 1.0 meter cable. IP30, NEMA Type 1. Panel mount with optional Bezel Kit.	**22-HIM-A3**	✓	✓	✓	✓	✓
Bezel Kit. Panel Mount for LCD Display, Remote Handheld Unit. IP30, NEMA Type 1. Includes a 22-RJ45CBL-C20 cable.	**22-HIM-B1**	✓	✓	✓	✓	✓
DSI HIM Cable (DSI HIM to RJ45 cable)						
1.0 Meter (3.3 Feet)	**22-HIM-H10**	✓	✓	✓	✓	✓
2.9 Meter (9.51 Feet)	**22-HIM-H30**	✓	✓	✓	✓	✓

♣ The 22-HIM-C2S is smaller than the 22-HIM-C2 and cannot be used as a direct replacement.

Safety Options

Description	Cat. No.	Used with PowerFlex Drive				
		4M	4	40	40P	400
DriveGuard Safe Torque-Off	**20A-DG01**				✓	

Other Options

Description	Cat. No.	Used with PowerFlex Drive				
		4M	4	40	40P	400
Auxiliary Relay Board - Expands drive output capabilities - Frames D…H only.	**AK-U9-RLB1**					✓

Terminators

Description ★	Cat. No.	Used with PowerFlex Drive				
		4M	4	40	40P	400
for use with 3.7 kW (5 Hp) & below drives	**1204-TFA1**	✓	✓	✓	✓	✓
for use with 1.5 kW (2 Hp) & up drives	**1204-TFB2**	✓	✓	✓	✓	✓

★ Refer to Appendix A of publication Drives-IN001 for selection information.

Reflected Wave Reduction Modules w/Common Mode Choke

Description ★	Cat. No.	Used with PowerFlex Drive				
		4M	4	40	40P	400
17A with Common Mode Choke	**1204-RWC-17-A**	✓	✓	✓	✓	✓

★ Refer to Appendix A of publication Drives-IN001 for selection information.

Reflected Wave Reduction Modules

Voltage	ND kW	ND Hp	Cat. No.	Used with PowerFlex Drive				
				4M	4	40	40P	400
380… 480V AC	2.2…4	3…5	**1321-RWR8-DP**	✓	✓	✓	✓	✓
	4	5	**1321-RWR12-DP**	✓		✓	✓	✓
	5.5	7.5	**1321-RWR18-DP**	✓		✓	✓	✓
	7.5	10	**1321-RWR25-DP**	✓		✓	✓	✓
	11	15	**1321-RWR25-DP**	✓		✓	✓	✓
	15	20	**1321-RWR35-DP**					✓
	18.5	25	**1321-RWR45-DP**					✓
	22	30	**1321-RWR55-DP**					✓
	30	40	**1321-RWR80-DP**					✓
	37	50	**1321-RWR80-DP**					✓
	45	60	**1321-RWR100-DP**					✓
	55	75	**1321-RWR130-DP**					✓
	75	100	**1321-RWR160-DP**					✓
	90	125	**1321-RWR200-DP**					✓
	110	150	**1321-RWR250-DP**					✓
	149	200	**1321-RWR320-DP**					✓
	187	250	**1321-RWR320-DP**					✓
500… 600V AC	4	5	**1321-RWR8-EP**			✓	✓	
	5.5	7.5	**1321-RWR12-EP**			✓	✓	
	7.5	10	**1321-RWR18-EP**			✓	✓	
	11	15	**1321-RWR25-EP**			✓	✓	

Communication Option Kits

Description	Cat. No.	Used with PowerFlex Drive				
		4M	4	40	40P	400
BACnet® MS/TP RS485 Communication Adapter	22-COMM-B		✓ §	✓ Δ		✓
ControlNet™ Communication Adapter	22-COMM-C	✓ §	✓ §	✓ Δ	✓ Δ	✓
DeviceNet™ Communication Adapter	22-COMM-D	✓ §	✓ §	✓ Δ	✓ Δ	✓
EtherNet/IP™ Communication Adapter	22-COMM-E	✓ §	✓ §	✓ Δ	✓ Δ	✓
LonWorks® Communication Adapter	22-COMM-L		✓ §	✓ Δ	✓ Δ	✓
PROFIBUS™ DP Communication Adapter	22-COMM-P	✓§‡	✓§‡	✓ Δ	✓ Δ	✓
Serial Converter Module (RS485 to RS232). Provides serial communication via DF1 protocol for use with DriveExplorer and DriveExecutive™ software. Includes DSI to RS232 serial converter, 1203-SFC serial cable, 22-RJ45CBL-C20 cable, and DriveExplorer Lite CD.	22-SCM-232	✓	✓	✓	✓	✓
Serial Cable. 2.0 meter with a locking low profile connector. Connects the serial converter to a 9-pin sub-miniature D female computer connector.	1203-SFC	✓	✓	✓	✓	✓
Serial Null Modem Adapter. Use when connecting the serial converter to DriveExplorer on a handheld PC.	1203-SNM	✓	✓	✓	✓	✓
Universal Serial Bus™ (USB) Converter includes 2m USB, 20-HIM-H10 & 22-HIM-H10 Cables.	1203-USB	✓	✓	✓	✓	✓
DSI Cable. 2.0 meter RJ45 to RJ45 cable, male to male connectors.	22-RJ45CBL-C20	✓	✓	✓	✓	✓
Splitter Cable. RJ45 one to two port splitter cable.	AK-U0-RJ45-SC1	✓	✓	✓	✓	✓
Terminal Block. RJ45 two position terminal block (6 pieces) with two 120 Ohm terminating resistors (loose).	AK-U0-RJ45-TB2P	✓	✓	✓	✓	✓
Terminating Resistors. 120 Ohm resistor embedded in an RJ45 connector (2 pieces).	AK-U0-RJ45-TR1	✓	✓	✓	✓	✓
DSI External Communications Kit. External mounting kit for 22-COMM Communication Adapters.	22-XCOMM-DC-BASE	✓	✓	✓	✓	✓
External Communications Kit Power Supply Optional 100…240V AC Power Supply for External DSI Communications Kit.	20-XCOMM-AC-PS1	✓	✓	✓	✓	✓
Compact I/O Module (3 Channel)	1769-SM2	✓	✓	✓	✓	✓
Serial Flash Firmware Kit Updates drive firmware via computer.	AK-U9-FLSH1					✓
Communication Adapter Cover Houses the Communication Adapter for B & C Frame drives. Note: Cover adds 25 mm (0.98 in.) to the overall depth of the drive.						
Frame B Drive (PowerFlex 40)	22B-CCB			✓ ♦		
Frame C Drive (PowerFlex 40)	22B-CCC			✓ ♦		
Frame C Drive (PowerFlex 400)	22C-CCC					✓ ♦
Frame B Drive (PowerFlex 40P)	22D-CCB				✓ ♦	
Frame C Drive (PowerFlex 40P)	22D-CCC				✓ ♦	

‡ When a 22-COMM-P adapter is configured for multi-drive mode, a PowerFlex 40, 40P or 400 drive must be used as a master drive on the network.

§ PowerFlex 4 & 4M drives require External DSI Communication Kits. Communication Adapters cannot be drive mounted.

Δ Requires a Communication Adapter Cover when used with Frame B & C PowerFlex 40/40P drives or Frame C PowerFlex 400 drives.

♦ If IP30, NEMA/UL Type 1 is required, a 22-JBCB (Frame B drives) or 22-JBCC (Frame C drives) must also be ordered.

IP30, NEMA/UL Type 1 Conversion Kit

Description	Frame	Cat. No.	Used with PowerFlex Drive				
			4M	4	40	40P	400
Converts IP20 drive to IP30, NEMA/UL Type 1 enclosure. Includes conduit box, mounting screws and plastic top panel.	A	22-JBAA		✓			
	B	22-JBAB		✓	✓	✓	
	C	22-JBAC			✓	✓	✓
Converts IP20 drive to IP30, NEMA/UL Type 1 enclosure. Includes communication option conduit box, mounting screws and plastic top panel.	B	22-JBCB			✓	✓	
	C	22-JBCC			✓	✓	✓

Dynamic Brake Resistors

Drive Rating			Minimum Resistance	Resistance ♠		Used with PowerFlex Drive				
Voltage	kW	Hp	Ohms ±10%	Ohms ±5%	Cat. No. ∇	4M	4	40	40P	400
100…120V, 50/60 Hz, Single -Phase	0.2	0.25	48	91	**AK-R2-091P500**		✓			
	0.4	0.5	48	91	**AK-R2-091P500**		✓	✓		
	0.75	1	48	91	**AK-R2-091P500**		✓	✓		
	1.1	1.5	48	91	**AK-R2-091P500**			✓		
200…240V, 50/60 Hz, Single-Phase	0.2	0.25	48	91	**AK-R2-091P500**		✓			
	0.4	0.5	48	91	**AK-R2-091P500**		✓	✓		
	0.75	1	48	91	**AK-R2-091P500**		✓	✓		
	1.5	2	48	91	**AK-R2-091P500**		✓	✓		
	2.2	3	32	47	**AK-R2-047P500**			✓		
200…240V, 50/60 Hz, Three-Phase	0.2	0.25	48	91	**AK-R2-091P500**		✓			
	0.4	0.5	48	91	**AK-R2-091P500**		✓	✓	✓	
	0.75	1	48	91	**AK-R2-091P500**		✓	✓	✓	
	1.5	2	48	91	**AK-R2-091P500**		✓	✓	✓	
	2.2	3	32	47	**AK-R2-047P500**		✓	✓	✓	
	3.7	5	19	47	**AK-R2-047P500**		✓	✓	✓	
	5.5	7.5	13	30	**AK-R2-030P1K2**	✓		✓	✓	
	7.5	10	10	30	**AK-R2-030P1K2**	✓		✓	✓	
380…480V, 50/60 Hz, Three-Phase	0.4	0.5	97	360	**AK-R2-360P500**		✓	✓	✓	
	0.75	1	97	360	**AK-R2-360P500**		✓	✓	✓	
	1.5	2	97	360	**AK-R2-360P500**		✓	✓	✓	
	2.2	3	97	120	**AK-R2-120P1K2**		✓	✓	✓	
	4.0	5	77	120	**AK-R2-120P1K2**		✓	✓	✓	
	5.5	7.5	55	120	**AK-R2-120P1K2**	✓		✓	✓	
	7.5	10	39	120	**AK-R2-120P1K2**	✓		✓	✓	
	11	15	24	120	**AK-R2-120P1K2** &	✓		✓	✓	
500…600V, 50/60 Hz, Three-Phase	0.75	1	120	360	**AK-R2-360P500**			✓	✓	
	1.5	2	120	360	**AK-R2-360P500**			✓	✓	
	2.2	3	82	120	**AK-R2-120P1K2**			✓	✓	
	4.0	5	82	120	**AK-R2-120P1K2**			✓	✓	
	5.5	7.5	51	120	**AK-R2-120P1K2**			✓	✓	
	7.5	10	51	120	**AK-R2-120P1K2**			✓	✓	
	11	15	51	120	**AK-R2-120P1K2** &			✓	✓	

♠ Verify resistor Ohms against minimum resistance for drive being used.

∇ Resistors listed are rated 5% duty cycle.

& Requires two resistors wired in parallel.

Spare Parts

Description		Cat. No.	Used with PowerFlex Drive				
			4M	4	40	40P	400
Fan Replacement Kits	Fan Replacement Kit - Frame A	SK-U1-FAN1-A1		✓			
	Fan Replacement Kit - Frame B, 1 Fan	SK-U1-FAN1-B1		✓	✓	✓	
	Fan Replacement Kit - Frame B, 2 Fans	SK-U1-FAN2-B1		✓	✓	✓	
	Fan Replacement Kit - Frame A	SK-U1-FFAN1-A1	✓				
	Fan Replacement Kit - Frame B	SK-U1-FFAN1-B1	✓				
	Fan Replacement Kit - Frame C	SK-U1-FFAN1-C1	✓				
	Fan Replacement Kit - Frame C, 1 Fan	SK-U1-FAN1-C1			✓	✓	✓★
	Fan Replacement Kit - Frame C, 1 Fan, 15 Hp	SK-U1-FAN1-C2			✓	✓	✓‡
	Fan Replacement Kit, NEMA 4X	SK-U1-FAN1-B4			✓		
	Fan Replacement Kit - Frame D, 2 Fans, B049…B090 & D038…D060 Ratings	SK-U1-FAN2-D1					✓
	Fan Replacement Kit - Frame E, 2 Fans, B120…B145 & D072…D142 Ratings	SK-U1-FAN2-E2					✓
	Fan Replacement Kit - Frame F, 2 Fans, IGBT, D170 & D208 Ratings	SK-U1-FAN2-F1					✓
	Fan Replacement Kit - Frame F, 1 Fan, Rectifier, D170 & D208 Ratings	SK-U1-FAN1-F2					✓
	Fan Replacement Kit - Frame F, 1 Fan, Choke, D170 & D208 Ratings	SK-U1-FAN1-F3					✓
	Fan Replacement Kit - Frame G, 1 Fan (Side), D260 & D310 Ratings	SK-U1-FAN1-G1					✓
	Fan Replacement Kit - Frame G, 4 Fans (Bottom), D260 & D310 Ratings	SK-U1-FAN4-G3					✓
	Fan Replacement Kit - Frame H, 1 Fan (Upper Side), D370 & D460 Ratings	SK-U1-FAN1-H1					✓
	Fan Replacement Kit - Frame H, 1 Fan (Middle Side), D370 & D460 Ratings	SK-U1-FAN1-H2					✓
	Fan Replacement Kit - Frame H, 4 Fans (Bottom), D370 & D460 Ratings	SK-U1-FAN4-H3					✓
Covers	Encoder Terminal Cover (All Frames)	SK-U1-DCVR4-EN				✓	
	Frame A Cover with Power Terminal Guard	SK-U1-ACVR1-A1		✓			
	Frame B Cover with Power Terminal Guard	SK-U1-ACVR1-B1		✓			
	Frame A Cover	SK-U1-FCVR-A1	✓				
	Frame B Cover	SK-U1-FCVR-B1	✓				
	Frame C Cover	SK-U1-FCVR-C1	✓				
	Frame B Cover with Power Terminal Guard	SK-U1-BCVR1-B1			✓		
	Frame C Cover with Power Terminal Guard	SK-U1-BCVR1-C1			✓		
	Frame B Cover, NEMA 4X	SK-U1-BCVR1-B4			✓		
	Frame B Cover with Power Terminal Guard	SK-U1-DCVR3-B1				✓	
	Frame C Cover with Power Terminal Guard	SK-U1-DCVR3-C1				✓	
	Frame C Cover with Power Terminal Guard	SK-U1-CCVR1-C1					✓
	Frame D Cover	SK-U1-CCVR1-D1					✓
	Frame E Cover	SK-U1-CCVR1-E1					✓
	Frame F Cover	SK-U1-CCVR1-F1					✓
	Frame G Cover	SK-U1-CCVR1-G1					✓
	Frame H Cover	SK-U1-CCVR1-H1					✓
	NEMA 4X Replacement Conduit Plugs	SK-U1-PLUGS-B4			✓		

★ 3…10 Hp at 200…240V AC and 3…10 Hp at 380…480V AC
‡ 15…20 Hp at 380…480V AC

EMC Filters (Required to Meet CE Certification)

Drive Ratings			PowerFlex 4M		PowerFlex 4		PowerFlex 40/40P		PowerFlex 400
			S Type Filter	L Type Filter	S Type Filter	L Type Filter	S Type Filter	L Type Filter	IP00 (NEMA/UL Type Open)
Input Voltage	kW	Hp	Cat. No. ★	Cat. No. §	Cat. No. ★	Cat. No. §	Cat. No. ★	Cat. No. §	Cat. No. ★
100…120V, 50/60 Hz, Single-Phase	0.2	0.25	–	22F-RF010-AL	–	22-RF010-AL	–	–	–
	0.4	0.5	–	22F-RF010-AL	–	22-RF010-AL	–	22-RF018-BL Δ	–
	0.75	1	–	22F-RF025-BL	–	22-RF018-BL	–	22-RF018-BL Δ	–
	1.1	1.5	–	22F-RF025-BL	–	22-RF025-CL ♣	–	22-RF018-BL Δ	–
200…240V, 50/60 Hz, Single-Phase	0.2	0.25	‡	22F-RF010-AL	‡	22-RF010-AL	–	–	–
	0.4	0.5	‡	22F-RF010-AL	‡	22-RF010-AL	‡	22-RF018-BL Δ	–
	0.75	1	‡	22F-RF010-AL	‡	22-RF010-AL	‡	22-RF018-BL Δ	–
	1.5	2	‡	22F-RF025-BL	‡	22-RF018-BL	‡	22-RF018-BL Δ	–
	2.2	3	‡	22F-RF025-BL	–	–	‡	22-RF025-CL Δ	–
200…240V, 50/60 Hz, Single-Phase, NO BRAKE	0.2	0.25	–	–	‡	22-RF010-AL	–	–	–
	0.4	0.5	–	–	‡	22-RF010-AL	–	–	–
	0.75	1	–	–	‡	22-RF010-AL	–	–	–
	1.5	2	–	–	‡	22-RF018-BL	–	–	–
	2.2	3	–	–	‡	22-RF025-CL ♣	–	–	–
200…240V, 50/60 Hz, Three-Phase	0.2	0.25	22F-RF9P5-AS	22F-RF9P5-AL	22-RF9P5-AS	22-RF9P5-AL	–	–	–
	0.4	0.5	22F-RF9P5-AS	22F-RF9P5-AL	22-RF9P5-AS	22-RF9P5-AL	22-RF021-BS ♦	22-RF021-BL	–
	0.75	1	22F-RF9P5-AS	22F-RF9P5-AL	22-RF9P5-AS	22-RF9P5-AL	22-RF021-BS ♦	22-RF021-BL	–
	1.5	2	22F-RF9P5-AS	22F-RF9P5-AL	22-RF9P5-AS	22-RF9P5-AL	22-RF021-BS ♦	22-RF021-BL	–
	2.2	3	22F-RF021-BS	22F-RF021-BL	22-RF021-BS	22-RF021-BL	22-RF021-BS ♦	22-RF021-BL	22-RF034-CS
	3.7	5	22F-RF021-BS	22F-RF021-BL	22-RF021-BS	22-RF021-BL	22-RF021-BS ♦	22-RF021-BL	22-RF034-CS
	5.5	7.5	22F-RF039-CS	22F-RF039-CL	–	–	22-RF034-CS	22-RF034-CL	22-RF034-CS
	7.5	10	22F-RF039-CS	22F-RF039-CL	–	–	22-RF034-CS	22-RF034-CL	22-RF034-CS
	11	15	–	–	–	–	–	–	22-RFD070
	15	20	–	–	–	–	–	–	22-RFD100
	18.5	25	–	–	–	–	–	–	22-RFD100
	22	30	–	–	–	–	–	–	22-RFD150
	30	40	–	–	–	–	–	–	22-RFD150
	37	50	–	–	–	–	–	–	22-RFD180
380…480V, 50/60 Hz, Three-Phase	0.4	0.5	22F-RF6P0-AS	22F-RF6P0-AL	22-RF5P7-AS	22-RF5P7-AL	22-RF012-BS	22-RF012-BL	–
	0.75	1	22F-RF6P0-AS	22F-RF6P0-AL	22-RF5P7-AS	22-RF5P7-AL	22-RF012-BS	22-RF012-BL	–
	1.5	2	22F-RF6P0-AS	22F-RF6P0-AL	22-RF5P7-AS	22-RF5P7-AL	22-RF012-BS	22-RF012-BL	–
	2.2	3	22F-RF012-BS	22F-RF012-BL	22-RF012-BS	22-RF012-BL	22-RF012-BS	22-RF012-BL	22-RF018-CS
	3.7	5	22F-RF012-BS	22F-RF012-BL	22-RF012-BS	22-RF012-BL	22-RF012-BS	22-RF012-BL	22-RF018-CS
	5.5	7.5	22F-RF026-CS	22F-RF026-CL	–	–	22-RF018-CS	22-RF018-CL	22-RF018-CS
	7.5	10	22F-RF026-CS	22F-RF026-CL	–	–	22-RF018-CS	22-RF018-CL	22-RF018-CS
	11	15	22F-RF026-CS	22F-RF026-CL	–	–	22-RF026-CS	22-RF026-CL	22-RF026-CS
	15	20	–	–	–	–	–	–	22-RFD036
	18.5	25	–	–	–	–	–	–	22-RFD050
	22	30	–	–	–	–	–	–	22-RFD050
	30	40	–	–	–	–	–	–	22-RFD070
	37	50	–	–	–	–	–	–	22-RFD100
	45	60	–	–	–	–	–	–	22-RFD100
	55	75	–	–	–	–	–	–	22-RFD150
	75	100	–	–	–	–	–	–	22-RFD180
	90	125	–	–	–	–	–	–	22-RFD208
	110	150	–	–	–	–	–	–	22-RFD208
	132	200	–	–	–	–	–	–	22-RFD323
	160	250	–	–	–	–	–	–	22-RFD480
	200	300	–	–	–	–	–	–	22-RFD480
	250	350	–	–	–	–	–	–	22-RFD480

Continued on next page

EMC Filters *(continued)*

Drive Ratings			PowerFlex 4M		PowerFlex 4		PowerFlex 40/40P		PowerFlex 400
			S Type Filter	L Type Filter	S Type Filter	L Type Filter	S Type Filter	L Type Filter	IP00 (NEMA/UL Type Open)
Input Voltage	kW	Hp	Cat. No. ★	Cat. No. §	Cat. No. ★	Cat. No. §	Cat. No. ★	Cat. No. §	Cat. No. ★
500…600V, 50/60 Hz, Three-Phase	0.75	1	–	–	–	–	–	22-RF8P0-BL	–
	1.5	2	–	–	–	–	–	22-RF8P0-BL	–
	2.2	3	–	–	–	–	–	22-RF8P0-BL	–
	4.0	5	–	–	–	–	–	22-RF8P0-BL	–
	5.5	7.5	–	–	–	–	–	22-RF015-CL	–
	7.5	10	–	–	–	–	–	22-RF015-CL	–
	11	15	–	–	–	–	–	22-RF024-CL	–

★ This filter is suitable for use with a cable length of up to 10 meters for Class A and 1 meter for Class B environments.
‡ Drives are available in these ratings with internal "S Type" filters.
§ This filter is suitable for use with a cable length of up to 100 meters for Class A and 5 meters for Class B environments.
♣ The piggyback mounting option cannot be used with Frame B PowerFlex 4 drives and Frame C EMC Line Filters.
Δ PowerFlex 40 Only.
♦ Filter must be Series B or later.

DC Series Bus Inductors

Drive Rating				Inductance		Used with PowerFlex Drive				
Voltage	kW	Hp	Amps	mH	Cat. No.	4M	4	40	40P	400
200…240V, 50/60 Hz, Three-Phase	2.2	3	12	1.00	1321-DC12-1					✓
	3.7	5	17.5	0.65	1321-DC18-1					✓
	5.5	7.5	32	0.85	1321-DC32-1			✓		✓
	7.5	10	40	0.75	1321-DC40-2			✓		✓
400…480V, 50/60 Hz, Three-Phase	2.2	3	6	2	1321-DC9-2					✓
	4.0	5	10.5	2.1	1321-DC12-2					✓
	5.5	7.5	18	3.75	1321-DC18-4			✓		✓
	7.5	10	25	1.28	1321-DC25-4			✓		✓
	11	15	32	2.68	1321-DC32-3			✓		✓
	15	20	30	2.5	1321-DC40-4					✓
500…600V, 50/60 Hz, Three-Phase	5.5	7.5	12	2.1	1321-DC12-2_600			✓		
	7.5	10	18	3.75	1321-DC18-4			✓		
	11	15	25	1.28	1321-DC25-4			✓		

Isolation Transformers for PowerFlex 400 - IP32, NEMA/UL Type 3R Standalone, 4…6% Nominal Impedance

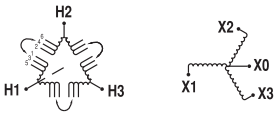


Diagram 1

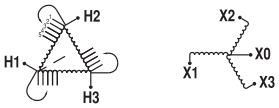


Diagram 2

Rating		Wiring	208V Primary	230V Primary	460V Primary		575V Primary	
			208V, 60 Hz, Three-Phase Secondary	230V, 60 Hz, Three-Phase Secondary	230V, 60 Hz, Three-Phase Secondary	460V, 60 Hz, Three-Phase Secondary	230V, 60 Hz, Three-Phase Secondary	460V, 60 Hz, Three-Phase Secondary
kW	Hp	Diagram	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.
2.2	3.0	1	1321-3TW005-XX	1321-3TW005-AA	1321-3TW005-BA	1321-3TW005-BB	1321-3TW005-CA	1321-3TW005-CB
22	30	2	–	1321-3TW040-AA	1321-3TW040-BA	1321-3TW040-BB	1321-3TW040-CA	1321-3TW040-CB
30	40	2	–	1321-3TW051-AA	1321-3TW051-BA	1321-3TW051-BB	1321-3TW051-CA	1321-3TW051-CB
37	50	2	–	1321-3TH063-AA	1321-3TH063-BA	1321-3TH063-BB	–	–
45	60	2	–	–	–	1321-3TH075-BB	–	–
55	75	2	–	–	–	1321-3TH093-BB	–	–
75	100	2	–	–	–	1321-3TH118-BB	–	–
90	125	2	–	–	–	1321-3TH145-BB	–	–
110	150	2	–	–	–	1321-3TH175-BB	–	–
132	200	2	–	–	–	1321-3TH220-BB	–	–
160	250	2	–	–	–	1321-3TH275-BB	–	–
200	300	2	–	–	–	1321-3TH330-BB	–	–
250	350	2	–	–	–	1321-3TH440-BB	–	–

Line Reactors - 3% Impedance

Drive Ratings				IP00 ★ (NEMA/UL Open Type)	IP11 ★ (NEMA/UL Type 1)	Used with PowerFlex Drive				
Voltage	kW	Hp	Amps	Cat. No.	Cat. No.	4M	4	40	40P	400
200…240V, 60 Hz, Three-Phase	0.2	0.25	2.0	**1321-3R2-A**	–	✓	✓			
	0.4	0.5	4.0	**1321-3R4-B**	–	✓	✓	✓	✓	
	0.75	1	8.0	**1321-3R8-B**	–	✓	✓	✓	✓	
	1.5	2	8.0	**1321-3R8-A**	–	✓	✓	✓	✓	
	2.2	3	12	**1321-3R12-A**	**1321-3RA12-A**	✓	✓	✓	✓	✓
	3.7	5	17.5	**1321-3R18-A**	**1321-3RA18-A**	✓	✓	✓	✓	✓
	5.5	7.5	24	**1321-3R25-A**	**1321-3RA25-A**	✓		✓	✓	✓
	7.5	10	33	**1321-3R35-A**	**1321-3RA35-A**	✓		✓	✓	✓
	11	15	49	**1321-3R45-A**	**1321-3RA45-A**					✓
	15	20	65	**1321-3R55-A**	**1321-3RA55-A**					✓
	18.5	25	75	**1321-3R80-A**	**1321-3RA80-A**					✓
	22	30	90	**1321-3R80-A**	**1321-3RA80-A**					✓
	30	40	120	**1321-3R100-A**	**1321-3RA100-A**					✓
	37	50	145	**1321-3R130-A**	**1321-3RA130-A**					✓
380…480V, 60 Hz, Three-Phase	0.4	0.5	2.0	**1321-3R2-B**	–	✓	✓	✓	✓	
	0.75	1	4.0	**1321-3R4-C**	–	✓	✓	✓	✓	
	1.5	2	4.0	**1321-3R4-B**	–	✓	✓	✓	✓	
	2.2	3	6.0	**1321-3R8-C**	**1321-3RA8-C**	✓	✓	✓	✓	✓
	4.0	5	10.5	**1321-3R8-B**	**1321-3RA8-B**	✓	✓	✓	✓	✓
	5.5	7.5	12	**1321-3R12-B**	**1321-3RA12-B**	✓		✓	✓	✓
	7.5	10	17	**1321-3R18-B**	**1321-3RA18-B**	✓		✓	✓	✓
	11	15	22	**1321-3R25-B**	**1321-3RA25-B**	✓		✓	✓	✓
	15	20	30	**1321-3R35-B**	**1321-3RA35-B**					✓
	18.5	25	38	**1321-3R35-B**	**1321-3RA35-B**					✓
	22	30	45.5	**1321-3R45-B**	**1321-3RA45-B**					✓
	30	40	60	**1321-3R55-B**	**1321-3RA55-B**					✓
	37	50	72	**1321-3R80-B**	**1321-3RA80-B**					✓
	45	60	88	**1321-3R80-B**	**1321-3RA80-B**					✓
	55	75	105	**1321-3R100-B**	**1321-3RA100-B**					✓
	75	100	142	**1321-3R130-B**	**1321-3RA130-B**					✓
	90	125	170	**1321-3R160-B**	**1321-3RA160-B**					✓
	110	150	208	**1321-3R200-B**	**1321-3RA200-B**					✓
500…600V, 60 Hz, Three-Phase	0.75	1	2.0	**1321-3R2-B**	–			✓	✓	
	1.5	2	4.0	**1321-3R4-C**	–			✓	✓	
	2.2	3	4.0	**1321-3R4-B**	–			✓	✓	
	4.0	5	8.0	**1321-3R8-C**	–			✓	✓	
	5.5	7.5	12	**1321-3R12-B**	–			✓	✓	
	7.5	10	12	**1321-3R12-B**	–			✓	✓	
	11	15	18	**1321-3R18-B**	–			✓	✓	

★ Catalog numbers listed are for 3% impedance. 5% impedance reactor types are also available. Refer to publication 1321-TD001.

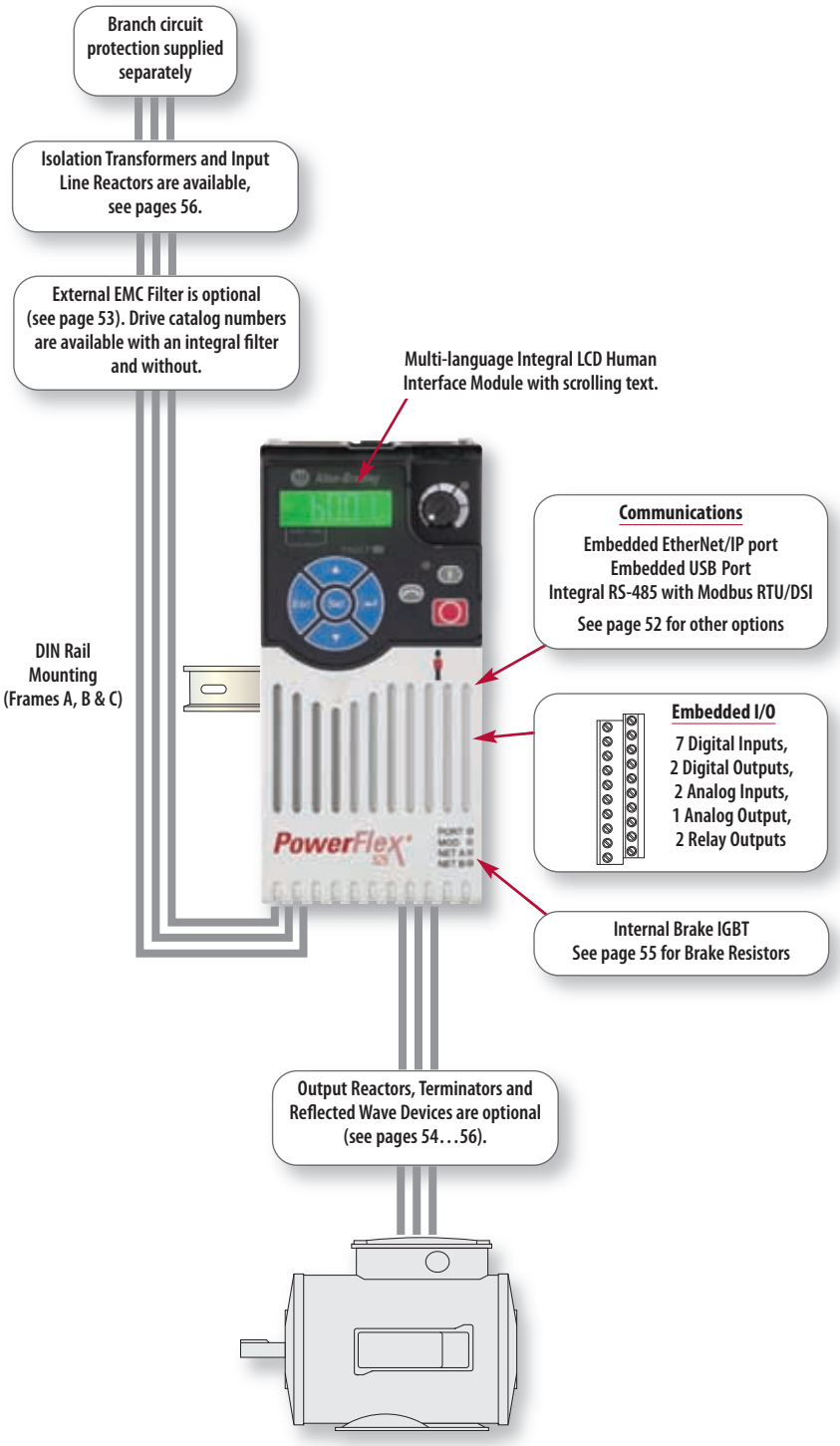
PowerFlex 525 AC Drive

PowerFlex 525 AC drives feature an innovative, modular design offering fast and easy installation and configuration. These cost-effective compact drives come with embedded EtherNet/IP™ communications, safety, USB configuration and a high ambient operating temperature. PowerFlex 525 AC drives also provide a variety of motor control including volts per hertz, sensorless vector control and closed loop velocity vector control, making these drives ideal for a vast array of applications.

PowerFlex 525 at a glance

Ratings	
100…120V:	0.4…1.1 kW / 0.5…1.5 Hp / 2.5…6 A
200…240V:	0.4…15 kW / 0.5…20 Hp / 2.5…62.1 A
380…480V:	0.4…22 kW / 0.5…30 Hp / 2.5…62.1 A
525…600V:	0.4…22 kW / 0.5…30 Hp / 0.9…32 A
Motor Control	• V/Hz Control • Sensorless Vector Control • Closed Loop Velocity Vector Control • Permanent Magnet Motor Control ♣
Enclosures	• IP20, NEMA/UL Type Open • IP30, NEMA/UL Type 1 (with optional kit)
Safety	Safe Torque-Off PLd/SIL2 Cat 3 (meets ISO 13849-1)
Additional Features	• Modular design eases installation • Operating temperatures up to 50 °C. Up to 70 °C with current derating and optional control module fan kit. • Embedded EtherNet/IP port with option for dual port EtherNet/IP card which supports DLR functionality • LCD HIM with multi-language support • MainsFree™ Programming via USB • Configure using Connected Components Workbench Software • Add-on Profiles for Studio 5000™ Logix Designer Software • Automatic Device Configuration • Economizer motor control for energy savings • Application specific parameter groups • Simple positioning control with optional encoder card • Conformal coating to IEC 60721 3C2 standards
Certifications	• ACS 156 • ATEX • C-Tick • c-UL, UL • CE • EPRI/SEMI F47 • GOST-R • KCC • RINA • RoHS • TÜV FS ISO/EN13849-1 (EN954-1) with Safe Torque-Off option
Options	See pages 52…56

♣ Permanent magnet motor control is scheduled for a future firmware release.


Branch circuit protection supplied separately
Isolation Transformers and Input Line Reactors are available, see pages 56.
External EMC Filter is optional (see page 53). Drive catalog numbers are available with an integral filter and without.
Multi-language Integral LCD Human Interface Module with scrolling text.
DIN Rail Mounting (Frames A, B & C)
Communications
Embedded EtherNet/IP port
Embedded USB Port
Integral RS-485 with Modbus RTU/DSI
See page 52 for other options
Embedded I/O
7 Digital Inputs,
2 Digital Outputs,
2 Analog Inputs,
1 Analog Output,
2 Relay Outputs
Internal Brake IGBT
See page 55 for Brake Resistors
Output Reactors, Terminators and Reflected Wave Devices are optional (see pages 54…56).

Additional Information

PowerFlex 525 Technical Data, publication 520-TD001
PowerFlex 525 User Manual, publication 520-UM001

Catalog Number Explanation

25B –	D	6P0	N	1	1	4
	Voltage Rating	Rating	Enclosure		Internal EMC Filter 0 = No 1 = Yes	

Product Selection

100…120V AC, Single-Phase, 50/60 Hz

Drive Ratings						No Filter	with Integral EMC Filter
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	2.5	A	**25B-V2P5N104**	—
0.75	1	0.75	1	4.8	B	**25B-V4P8N104**	—
1.1	1.5	1.1	1.5	6	B	**25B-V6P0N104**	—

200…240V AC, Single-Phase, 50/60 Hz

Drive Ratings						No Filter	with Integral EMC Filter ‡
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	2.5	A	**25B-A2P5N104**	**25B-A2P5N114**
0.75	1	0.75	1	4.8	A	**25B-A4P8N104**	**25B-A4P8N114**
1.5	1.5	1.5	2	8	B	**25B-A8P0N104**	**25B-A8P0N114**
2.2	3	2.2	3	11	B	**25B-A011N104**	**25B-A011N114**

‡ This filter is suitable for use with a cable length of up to 10 meters for C2 spec.

200…240V AC, Three-Phase, 50/60 Hz

Drive Ratings						No Filter	with Integral EMC Filter
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	2.5	A	**25B-B2P5N104**	—
0.75	1	0.75	1	5	A	**25B-B5P0N104**	—
1.5	2	1.5	2	8	A	**25B-B8P0N104**	—
2.2	3	2.2	3	11	A	**25B-B011N104**	—
4	5	4	5	17.5	B	**25B-B017N104**	—
5.5	7.5	5.5	7.5	24	C	**25B-B024N104**	—
7.5	10	7.5	10	32.2	D	**25B-B032N104**	—
11	15	11	15	48.3	E	**25B-B048N104**	—
15	20	11	15	62.1	E	**25B-B062N104**	—

380…480V AC, Three-Phase, 50/60 Hz

Drive Ratings						No Filter	with Integral EMC Filter ‡
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	1.4	A	**25B-D1P4N104**	**25B-D1P4N114**
0.75	1	0.75	1	2.3	A	**25B-D2P3N104**	**25B-D2P3N114**
1.5	2	1.5	2	4	A	**25B-D4P0N104**	**25B-D4P0N114**
2.2	3	2.2	3	6	A	**25B-D6P0N104**	**25B-D6P0N114**
4	5	4	5	10.5	B	**25B-D010N104**	**25B-D010N114**
5.5	7.5	5.5	7.5	13	C	**25B-D013N104**	**25B-D013N114**
7.5	10	7.5	10	17	C	**25B-D017N104**	**25B-D017N114**
11	15	11	15	24	D	**25B-D024N104**	**25B-D024N114**
15	20	11	15	30	D	**25B-D030N104**	**25B-D030N114**
18.5	25	15	20	37	E	**25B-D037N114** §	**25B-D037N114**
22	30	18.5	25	43	E	**25B-D043N114** §	**25B-D043N114**

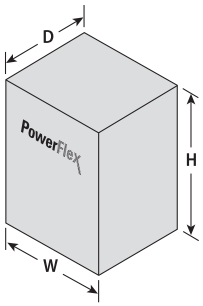
‡ This filter is suitable for use with a cable length of up to 10 meters for C2 spec.
§ With EMC filter.

525…600V AC, Three-Phase, 50/60 Hz

Drive Ratings						No Filter	with Integral EMC Filter
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	0.9	A	**25B-E0P9N104**	—
0.75	1	0.75	1	1.7	A	**25B-E1P7N104**	—
1.5	2	1.5	2	3	A	**25B-E3P0N104**	—
2.2	3	2.2	3	4.2	A	**25B-E4P2N104**	—
4	5	4	5	6.6	B	**25B-E6P6N104**	—
5.5	7.5	5.5	7.5	9.9	C	**25B-E9P9N104**	—
7.5	10	7.5	10	12	C	**25B-E012N104**	—
11	15	11	15	19	D	**25B-E019N104**	—
15	20	11	15	22	D	**25B-E022N104**	—
18.5	25	15	20	27	E	**25B-E027N104**	—
22	30	18.5	25	32	E	**25B-E032N104**	—

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP20, NEMA/UL Type Open

Frame	H	W	D	Weight
A	152.0 (5.98)	72.0 (2.83)	172.0 (6.77)	1.10 (2.4)
B	180.0 (7.08)	87.0 (3.42)	172.0 (6.77)	1.60 (3.5)
C	220.0 (8.66)	109.0 (4.29)	184.0 (7.24)	2.30 (5.1)
D	260.0 (10.23)	130.0 (5.11)	212.0 (8.34)	3.20 (7.1)
E	300.0 (11.81)	185.0 (7.28)	279.0 (10.98)	12.90 (28.4)

PowerFlex 520-Series Options

Human Interface Modules and Accessories

Description	Cat. No.
Remote (Panel Mount) LCD Display, Digital Speed Control, CopyCat Capable. Includes 2.0 meter cable. IP66, NEMA Type 4X/12 - Indoor Use Only.	**22-HIM-C2S ♣**
Remote Handheld, LCD Display, Full Numeric Keypad, Digital Speed Control, CopyCat Capable. Includes 1.0 meter cable. IP30, NEMA Type 1. Panel mount with optional Bezel Kit.	**22-HIM-A3**
Bezel Kit. Panel Mount for LCD Display, Remote Handheld Unit. IP30, NEMA Type 1. Includes a 22-RJ45CBL-C20 cable.	**22-HIM-B1**
DSI HIM Cable (DSI HIM to RJ45 cable)	
1.0 Meter (3.3 Feet)	**22-HIM-H10**
2.9 Meter (9.51 Feet)	**22-HIM-H30**

♣ The 22-HIM-C2S is smaller than the 22-HIM-C2 and cannot be used as a direct replacement.

Communication Option Kits

Description	Cat. No.
DeviceNet™ Communication Adapter	**25-COMM-D**
EtherNet/IP™ Communication Adapter - Dual Port	**25-COMM-E2P**
PROFIBUS™ DP Communication Adapter	**25-COMM-P**
Serial Converter Module (RS485 to RS232). Provides serial communication via DF1 protocol for use with DriveExplorer and DriveExecutive™ software. Includes DSI to RS232 serial converter, 1203-SFC serial cable, 22-RJ45CBL-C20 cable, and DriveExplorer Lite CD.	**22-SCM-232**
Serial Cable. 2.0 meter with a locking low profile connector. Connects the serial converter to a 9-pin sub-miniature D female computer connector.	**1203-SFC**
Serial Null Modem Adapter. Use when connecting the serial converter to DriveExplorer on a handheld PC.	**1203-SNM**
Universal Serial Bus™ (USB) Converter includes 2m USB, 20-HIM-H10 & 22-HIM-H10 Cables.	**1203-USB**
DSI Cable. 2.0 meter RJ45 to RJ45 cable, male to male connectors.	**22-RJ45CBL-C20**
Splitter Cable. RJ45 one to two port splitter cable.	**AK-U0-RJ45-SC1**
Terminal Block. RJ45 two position terminal block (6 pieces) with two 120 Ohm terminating resistors (loose).	**AK-U0-RJ45-TB2P**
Terminating Resistors. 120 Ohm resistor embedded in an RJ45 connector (2 pieces).	**AK-U0-RJ45-TR1**
DSI External Communications Kit. External mounting kit for 22-COMM Communication Adapters.	**22-XCOMM-DC-BASE**
External Communications Kit Power Supply Optional 100…240V AC Power Supply for External DSI Communications Kit.	**20-XCOMM-AC-PS1**
Compact I/O Module (3 Channel)	**1769-SM2**

IP30, NEMA/UL Type 1 Conversion Kit

Description	Frame	Cat. No.
Converts IP20 drive to IP30, NEMA/UL Type 1 enclosure.	A	**25-JBAA**
	B	**25-JBAB**
	C	**25-JBAC**
	D	**25-JBAD**
	E	**25-JBAE**

Other Options

Description	Frame	Cat. No.
EMC Grounding Plate	A	**25-EMC1-FA**
	B	**25-EMC1-FB**
	C	**25-EMC1-FC**
	D	**25-EMC1-FD**
	E	**25-EMC1-FE**
Mounting Adapter Plate, Bulletin 160 AC Drive to PowerFlex 525	A	**25-MAP-FA**
	B	**25-MAP-FB**
Incremental Encoder	All	**25-ENC-1**
Control Module Fan Kit for 70 °C operation and/or horizontal drive mounting.	A…D	**25-FAN1-70C**
	E	**25-FAN2-70C**

EMC Filters (Required to Meet CE Certification)

Drive Ratings				Cat. No.
Input Voltage	kW	Hp	Frame	
100…120V, Single-Phase, 50/60 Hz	0.2	0.25	A	**25-RF011-AL**
	0.4	0.5	A	
	0.75	1	B	**25-RF023-BL**
	1	1.5	B	
200…240V, Single-Phase, 50/60 Hz	0.2	0.25	A	**25-RF011-AL**
	0.4	0.5	A	
	0.75	1	B	
	1.5	2	B	**25-RF023-BL**
	2.2	3	B	
200…240V, Three-Phase, 50/60 Hz	0.2	0.25	A	**25-RF014-AL**
	0.4	0.5	A	
	0.75	1	A	
	1.5	2	A	
	2.2	3	A	
	3.7	5	B	**25-RF021-BL**
	5.5	7.5	C	**25-RF027-CL**
	7.5	10	D	**25-RF035-DL**
	11	15	E	**25-RF056-EL**
	15	20	E	
380…480V, Three-Phase, 50/60 Hz	0.4	0.5	A	**25-RF7P5-AL**
	0.75	1	A	
	1.5	2	A	
	2.2	3	A	
	3.7	5	B	**25-RF014-BL**
	5.5	7.5	C	**25-RF018-CL**
	7.5	10	C	
	11	15	D	**25-RF033-DL**
	15	20	D	
	18.5	25	E	**25-RF039-EL**
	22	30	E	
525…600V, Three-Phase, 50/60 Hz	0.4	0.5	A	**25-RF8P0-BL**
	0.75	1	A	
	1.5	2	A	
	2.2	3	A	
	3.7	5	B	
	5.5	7.5	C	**25-RF014-CL**
	7.5	10	C	
	11	15	D	**25-RF027-DL**
	15	20	D	
	18.5	25	E	**25-RF029-EL**
	22	30	E	

Control Module

Description	Frame	Cat. No.
PowerFlex 525 Control Module (includes control module front cover)	All	**25B-CTM1**

Power Modules §

Ratings					No Filter	with Integral EMC Filter
Input Voltage	Normal Duty		Heavy Duty			
	kW	Hp	kW	Hp	Cat No.	Cat No.
100…120V AC, Single-Phase, 50/60 Hz	0.2	0.25	0.2	0.25	**25-PM1-V1P6**	—
	0.4	0.5	0.4	0.5	**25-PM1-V2P5**	—
	0.75	1	0.75	1	**25-PM1-V4P8**	—
	1.5	2	1..5	2	**25-PM1-V6P0**	—
200…240V AC, Single-Phase, 50/60 Hz	0.2	0.25	0.2	0.25	**25-PM1-A1P6**	**25-PM2-A1P6**
	0.4	0.5	0.4	0.5	**25-PM1-A2P5**	**25-PM2-A2P5**
	0.75	1	0.75	1	**25-PM1-A4P8**	**25-PM2-A4P8**
	1.5	2	1.5	2	**25-PM1-A8P0**	**25-PM2-A8P0**
	2.2	3	2.2	3	**25-PM1-A011**	**25-PM2-A011**
200…240V AC, Three-Phase, 50/60 Hz	0.2	0.25	0.2	0.25	**25-PM1-B1P6**	—
	0.4	0.5	0.4	0.5	**25-PM1-B2P5**	—
	0.75	1	0.75	1	**25-PM1-B5P0**	—
	1.5	2	1.5	2	**25-PM1-B8P0**	—
	2.2	3	2.2	3	**25-PM1-B011**	—
	4	5	4	5	**25-PM1-B017**	—
	5.5	7.5	5.5	7.5	**25-PM1-B024**	—
	7.5	10	7.5	10	**25-PM1-B032**	—
	11	15	11	15	**25-PM1-B048**	—
	15	20	11	15	**25-PM1-B062**	—
380…480V AC, Three-Phase, 50/60 Hz	0.4	0.5	0.4	0.5	**25-PM1-D1P4**	**25-PM2-D1P4**
	0.75	1	0.75	1	**25-PM1-D2P3**	**25-PM2-D2P3**
	1.5	2	1.5	2	**25-PM1-D4P0**	**25-PM2-D4P0**
	2.2	3	2.2	3	**25-PM1-D6P0**	**25-PM2-D6P0**
	4	5	4	5	**25-PM1-D010**	**25-PM2-D010**
	5.5	7.5	5.5	7.5	**25-PM1-D013**	**25-PM2-D013**
	7.5	10	7.5	10	**25-PM1-D017**	**25-PM2-D017**
	11	15	11	15	**25-PM1-D024**	**25-PM2-D024**
	15	20	11	15	**25-PM1-D030**	**25-PM2-D030**
	18.5	25	15	20	—	**25-PM2-D037**
	22	30	18.5	25	—	**25-PM2-D043**
525…600V AC, Three-Phase, 50/60 Hz	0.4	0.5	0.4	0.5	**25-PM1-E0P9**	—
	0.75	1	0.75	1	**25-PM1-E1P7**	—
	1.5	2	1.5	2	**25-PM1-E3P0**	—
	2.2	3	2.2	3	**25-PM1-E4P2**	—
	4	5	4	5	**25-PM1-E6P6**	—
	5.5	7.5	5.5	7.5	**25-PM1-E9P9**	—
	7.5	10	7.5	10	**25-PM1-E012**	—
	11	15	11	15	**25-PM1-E019**	—
	15	20	11	15	**25-PM1-E022**	—
	18.5	25	15	20	**25-PM1-E027**	—
	22	30	18.5	25	**25-PM1-E032**	—

§ Includes power module front cover (Frames B…E only).

Accessories

Description	Frame	Cat. No.
Power Module Front Cover	B	**25-PMFC-FB**
	C	**25-PMFC-FC**
	D	**25-PMFC-FD**
	E	**25-PMFC-FE**
Control Module Front Cover	All	**25B-CTMFC1**
Heatsink Fan Replacement Kit	A	**25-FAN1-FA**
	B	**25-FAN1-FB**
	C	**25-FAN1-FC**
	D	**25-FAN1-FD**
	E	**25-FAN1-FE**
Power Terminal Guard	A	**25-PTG1-FA**
	B	**25-PTG1-FB**
	C	**25-PTG1-FC**
	D	**25-PTG1-FD**
	E	**25-PTG1-FE**

Terminators

Description ★	Cat. No.
for use with 3.7 kW (5 Hp) & below drives	**1204-TFA1**
for use with 1.5 kW (2 Hp) & up drives	**1204-TFB2**

★ Refer to Appendix A of publication Drives-IN001 for selection information.

Reflected Wave Reduction Modules

Voltage	kW	Hp	Cat. No.
380… 480V AC	2.2…4	3…5	**1321-RWR8-DP**
	4	5	**1321-RWR12-DP**
	5.5	7.5	**1321-RWR18-DP**
	7.5	10	**1321-RWR25-DP**
	11	15	**1321-RWR25-DP**
	15	20	**1321-RWR35-DP**
	18.5	25	**1321-RWR45-DP**
	22	30	**1321-RWR55-DP**
500… 600V AC	4	5	**1321-RWR8-EP**
	5.5	7.5	**1321-RWR12-EP**
	7.5	10	**1321-RWR18-EP**
	11	15	**1321-RWR25-EP**

Reflected Wave Reduction Modules w/Common Mode Choke

Description ★	Cat. No.
17A with Common Mode Choke	**1204-RWC-17-A**

★ Refer to Appendix A of publication Drives-IN001 for selection information.

Dynamic Brake Resistors

Drive Rating			Minimum Resistance	Resistance ♠	
Voltage	kW	Hp	Ohms *±10%*	Ohms *±5%*	Cat. No. ∇
100…120V, 50/60 Hz, Single -Phase	0.4	0.5	48	91	**AK-R2-091P500**
	0.75	1	48	91	**AK-R2-091P500**
	1.1	1.5	48	91	**AK-R2-091P500**
200…240V, 50/60 Hz, Single-Phase	0.4	0.5	48	91	**AK-R2-091P500**
	0.75	1	48	91	**AK-R2-091P500**
	1.5	2	48	91	**AK-R2-091P500**
	2.2	3	32	47	**AK-R2-047P500**
200…240V, 50/60 Hz, Three-Phase	0.4	0.5	48	91	**AK-R2-091P500**
	0.75	1	48	91	**AK-R2-091P500**
	1.5	2	48	91	**AK-R2-091P500**
	2.2	3	32	47	**AK-R2-047P500**
	3.7	5	19	47	**AK-R2-047P500**
	5.5	7.5	13	30	**AK-R2-030P1K2**
	7.5	10	10	30	**AK-R2-030P1K2**
	11	15	—	—	**—**
	15	20	—	—	**—**
380…480V, 50/60 Hz, Three-Phase	0.4	0.5	97	360	**AK-R2-360P500**
	0.75	1	97	360	**AK-R2-360P500**
	1.5	2	97	360	**AK-R2-360P500**
	2.2	3	97	120	**AK-R2-120P1K2**
	4.0	5	77	120	**AK-R2-120P1K2**
	5.5	7.5	55	120	**AK-R2-120P1K2**
	7.5	10	39	120	**AK-R2-120P1K2**
	11	15	24	120	**AK-R2-120P1K2** &
	15	20	—	—	**—**
	18.5	25	—	—	**—**
	22	30	—	—	**—**
500…600V, 50/60 Hz, Three-Phase	0.75	1	120	360	**AK-R2-360P500**
	1.5	2	120	360	**AK-R2-360P500**
	2.2	3	82	120	**AK-R2-120P1K2**
	4.0	5	82	120	**AK-R2-120P1K2**
	5.5	7.5	51	120	**AK-R2-120P1K2**
	7.5	10	51	120	**AK-R2-120P1K2**
	11	15	51	120	**AK-R2-120P1K2** &
	15	20	—	—	**—**
	18.5	25	—	—	**—**
	22	30	—	—	**—**

♠ Verify resistor Ohms against minimum resistance for drive being used.

∇ Resistors listed are rated 5% duty cycle.

& Requires two resistors wired in parallel.

Line Reactors - 3% Impedance

Drive Ratings				IP00 ★ (NEMA/UL Open Type)	IP11 ★ (NEMA/UL Type 1)
Voltage	kW	Hp	Amps	Cat. No.	Cat. No.
200…240V, 60 Hz, Three-Phase	0.4	0.5	4.0	**1321-3R4-B**	**1321-3RA4-B**
	0.75	1	8.0	**1321-3R8-B**	**1321-3RA8-B**
	1.5	2	8.0	**1321-3R8-A**	**1321-3RA8-A**
	2.2	3	12	**1321-3R12-A**	**1321-3RA12-A**
	3.7	5	17.5	**1321-3R18-A**	**1321-3RA18-A**
	5.5	7.5	24	**1321-3R25-A**	**1321-3RA25-A**
	7.5	10	33	**1321-3R35-A**	**1321-3RA35-A**
	11	15	49	**1321-3R45-A**	**1321-3RA45-A**
	15	20	65	**1321-3R55-A**	**1321-3RA55-A**
380…480V, 60 Hz, Three-Phase	0.4	0.5	2.0	**1321-3R2-B**	**1321-3RA2-B**
	0.75	1	4.0	**1321-3R4-C**	**1321-3RA4-C**
	1.5	2	4.0	**1321-3R4-B**	**1321-3RA4-B**
	2.2	3	6.0	**1321-3R8-C**	**1321-3RA8-C**
	4.0	5	10.5	**1321-3R8-B**	**1321-3RA8-B**
	5.5	7.5	12	**1321-3R12-B**	**1321-3RA12-B**
	7.5	10	17	**1321-3R18-B**	**1321-3RA18-B**
	11	15	22	**1321-3R25-B**	**1321-3RA25-B**
	15	20	30	**1321-3R35-B**	**1321-3RA35-B**
	18.5	25	38	**1321-3R35-B**	**1321-3RA35-B**
	22	30	45.5	**1321-3R45-B**	**1321-3RA45-B**
500…600V, 60 Hz, Three-Phase	0.75	1	2.0	**1321-3R2-B**	**1321-3RA2-B**
	1.5	2	4.0	**1321-3R4-C**	**1321-3RA4-C**
	2.2	3	4.0	**1321-3R4-B**	**1321-3RA4-B**
	4.0	5	8.0	**1321-3R8-C**	**1321-3RA8-C**
	5.5	7.5	12	**1321-3R12-B**	**1321-3RA12-B**
	7.5	10	12	**1321-3R12-B**	**1321-3RA12-B**
	11	15	18	**1321-3R18-B**	**1321-3RA18-B**
	15	20	25	**1321-3R25-B**	**1321-3RA25-B**
	18.5	25	35	**1321-3R35-C**	**1321-3RA35-C**
	22	30	35	**1321-3R35-B**	**1321-3RA35-B**

★ Catalog numbers listed are for 3% impedance. 5% impedance reactor types are also available. Refer to publication 1321-TD001.

Notes

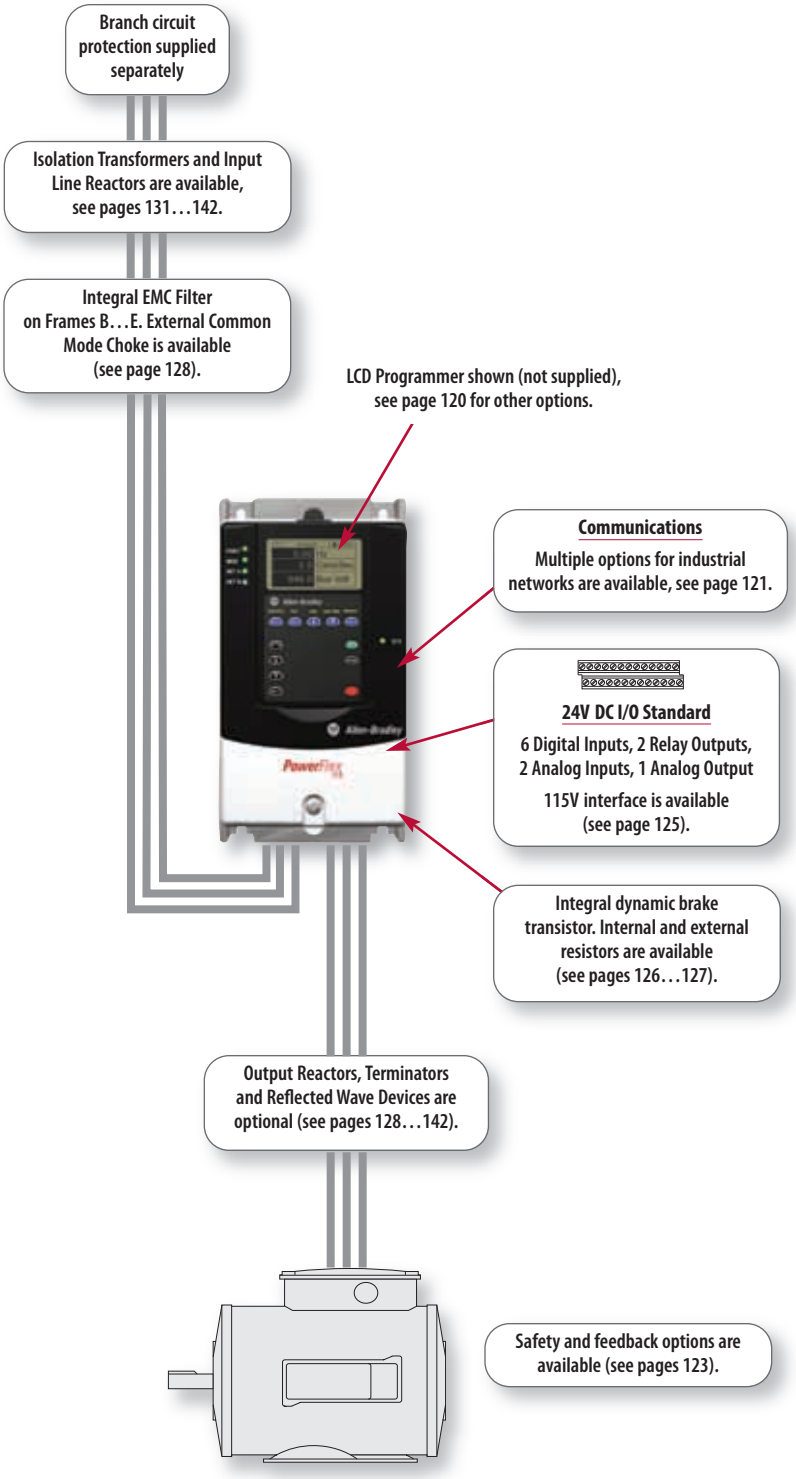
PowerFlex 70 AC Drive

The PowerFlex 70 offers a compact package of power, control and operator interface, designed to meet the demands for space, simplicity and reliability. This drive provides a broad spectrum of features, allowing you to easily integrate it into your architecture and configure it for most application needs.

PowerFlex 70 at a glance

Ratings	
200…240V:	0.37…18.5 kW / 0.5…25 Hp / 2.2…70 A
380…480V:	0.37…37 kW / 0.5…50 Hp / 1.1…72 A
500…600V:	0.5…50 Hp / 0.9…52 A
Motor Control	• V/Hz Control • Sensorless Vector Control • Vector Control with FORCE Technology (with and without encoder)
Enclosures	• IP20, NEMA/UL Type 1 • Flange Mount • IP54, NEMA/UL Type 12 • IP66, NEMA/UL Type 4X/12 for indoor use
Safety	DriveGuard Safe Torque-Off / EN 954-1 Cat. 3
Additional Features	• Speed and torque control with and without encoder feedback • Pjump and Traverse for Fibers application
Certifications	• ABS • C-Tick (excluding 600V) • c-UL, UL • CE ★ • IEC (Designed to Meet) • Lloyd's Register • NSF Certified (IP66, NEMA/UL Type 4X/12 only) • RINA Certified • SEMI F47 • TÜV FS ISO/EN13849-1 (EN954-1) with Safe Torque-Off option
Options	See pages 120…142

★ 600V class drives are declared to meet the Low Voltage Directive.


Branch circuit protection supplied separately
Isolation Transformers and Input Line Reactors are available, see pages 131…142.
Integral EMC Filter on Frames B…E. External Common Mode Choke is available (see page 128).
LCD Programmer shown (not supplied), see page 120 for other options.
Communications
Multiple options for industrial networks are available, see page 121.
24V DC I/O Standard
6 Digital Inputs, 2 Relay Outputs, 2 Analog Inputs, 1 Analog Output
115V interface is available (see page 125).
Integral dynamic brake transistor. Internal and external resistors are available (see pages 126…127).
Output Reactors, Terminators and Reflected Wave Devices are optional (see pages 128…142).
Safety and feedback options are available (see pages 123).

Additional Information

PowerFlex 70 Technical Data, publication 20A-TD001
PowerFlex 70 User Manual, publication 20A-UM001

Catalog Number Explanation

20A	B	2P2	A	0	A	Y	N	A	N	C	0
	Voltage Rating	Rating	Enclosure					Filter Option			

Product Selection

Panel Mount - IP20, NEMA/UL Type 1, No HIM

200...240V AC, Three-Phase Drives

240V AC Input						208V AC Input ‡							
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	with Filter	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.					
2.2	2.4	3.3	0.5	0.33	**20AB2P2A0AYNNNC0**	2.5	2.7	3.7	0.37	0.25	**20AB2P2A0AYNNNC0**	N	A
2.2	2.4	3.3	0.5	0.33	**20AB2P2A0AYNANC0**	2.5	2.7	3.7	0.37	0.25	**20AB2P2A0AYNANC0**	Y	B
4.2	4.8	6.4	1	0.75	**20AB4P2A0AYNNNC0**	4.8	5.5	7.4	0.75	0.55	**20AB4P2A0AYNNNC0**	N	A
4.2	4.8	6.4	1	0.75	**20AB4P2A0AYNANC0**	4.8	5.5	7.4	0.75	0.55	**20AB4P2A0AYNANC0**	Y	B
6.8	9	12	2	1.5	**20AB6P8A0AYNNNC0**	7.8	10.3	13.8	1.5	1.1	**20AB6P8A0AYNNNC0**	N	B
6.8	9	12	2	1.5	**20AB6P8A0AYNANC0**	7.8	10.3	13.8	1.5	1.1	**20AB6P8A0AYNANC0**	Y	B
9.6	10.6	14.4	3	2	**20AB9P6A0AYNNNC0**	11	12.1	16.5	2.2	1.5	**20AB9P6A0AYNNNC0**	N	B
9.6	10.6	14.4	3	2	**20AB9P6A0AYNANC0**	11	12.1	16.5	2.2	1.5	**20AB9P6A0AYNANC0**	Y	B
15.3	17.4	23.2	5	3	**20AB015A0AYNANC0**	17.5	19.2	26.2	4	3	**20AB015A0AYNANC0**	Y	C
22	24.2	33	7.5	5	**20AB022A0AYNANC0**	25.3	27.8	37.9	5.5	4	**20AB022A0AYNANC0**	Y	D
28	33	44	10	7.5	**20AB028A0AYNANC0**	32.2	37.9	50.6	7.5	5.5	**20AB028A0AYNANC0**	Y	D
42	46.2	63	15	10	**20AB042A0AYNANC0**	43	55.5	74	11	7.5	**20AB042A0AYNANC0**	Y	D
54	63	84	20	15	**20AB054A0AYNANC0**	62.1	72.4	96.6	15	11	**20AB054A0AYNANC0**	Y	E
70	81	108	25	20	**20AB070A0AYNANC0**	78.2	93.1	124	18.5	15	**20AB070A0AYNANC0**	Y	E

‡ Drive must be programmed to lower voltage to obtain the currents shown.

Panel Mount - IP20, NEMA/UL Type 1, No HIM (continued)

380...480V AC, Three-Phase Drives

480V AC Input						400V AC Input							
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	with Filter	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.					
1.1	1.2	1.6	0.5	0.33	**20AD1P1A0AYNNNC0**	1.3	1.4	1.9	0.37	0.25	**20AC1P3A0AYNNNC0**	N	A
1.1	1.2	1.6	0.5	0.33	**20AD1P1A0AYNANC0**	1.3	1.4	1.9	0.37	0.25	**20AC1P3A0AYNANC0**	Y	B
2.1	2.4	3.2	1	0.75	**20AD2P1A0AYNNNC0**	2.1	2.4	3.2	0.75	0.55	**20AC2P1A0AYNNNC0**	N	A
2.1	2.4	3.2	1	0.75	**20AD2P1A0AYNANC0**	2.1	2.4	3.2	0.75	0.55	**20AC2P1A0AYNANC0**	Y	B
3.4	4.5	6	2	1.5	**20AD3P4A0AYNNNC0**	3.5	4.5	6	1.5	1.1	**20AC3P5A0AYNNNC0**	N	A
3.4	4.5	6	2	1.5	**20AD3P4A0AYNANC0**	3.5	4.5	6	1.5	1.1	**20AC3P5A0AYNANC0**	Y	B
5	5.5	7.5	3	2	**20AD5P0A0AYNNNC0**	5	5.5	7.5	2.2	1.5	**20AC5P0A0AYNNNC0**	N	B
5	5.5	7.5	3	2	**20AD5P0A0AYNANC0**	5	5.5	7.5	2.2	1.5	**20AC5P0A0AYNANC0**	Y	B
8	8.8	12	5	3	**20AD8P0A0AYNNNC0**	8.7	9.9	13.2	4	3	**20AC8P7A0AYNNNC0**	N	B
8	8.8	12	5	3	**20AD8P0A0AYNANC0**	8.7	9.9	13.2	4	3	**20AC8P7A0AYNANC0**	Y	B
11	12.1	16.5	7.5	5	**20AD011A0AYNANC0**	11.5	13	17.4	5.5	4	**20AC011A0AYNANC0**	Y	C
14	16.5	22	10	7.5	**20AD014A0AYNANC0**	15	17.2	23.1	7.5	5.5	**20AC015A0AYNANC0**	Y	C
22	24.2	33	15	10	**20AD022A0AYNANC0**	22	24.2	33	11	7.5	**20AC022A0AYNANC0**	Y	D
27	33	44	20	15	**20AD027A0AYNANC0**	30	33	45	15	11	**20AC030A0AYNANC0**	Y	D
34	40.5	54	25	20	**20AD034A0AYNANC0**	37	45	60	18.5	15	**20AC037A0AYNANC0**	Y	D
40	51	68	30	25	**20AD040A0AYNANC0**	43	56	74	22	18.5	**20AC043A0AYNANC0**	Y	D
52	60	80	40	30	**20AD052A0AYNANC0**	60	66	90	30	22	**20AC060A0AYNANC0**	Y	E
65	78	104	50	40	**20AD065A0AYNANC0**	72	90	120	37	30	**20AC072A0AYNANC0**	Y	E

500...600V AC, Three-Phase Drives

600V AC Input							
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	with Filter	Frame Size
Cont.	1 Min.	3 Sec.					
0.9	1	1.4	0.5	0.33	**20AE0P9A0AYNNNC0**	N	A
1.7	1.9	2.6	1	0.75	**20AE1P7A0AYNNNC0**	N	A
2.7	3.6	4.8	2	1	**20AE2P7A0AYNNNC0**	N	A
3.9	4.3	5.8	3	1.5	**20AE3P9A0AYNNNC0**	N	B
6.1	6.7	9.1	5	3	**20AE6P1A0AYNNNC0**	N	B
9	9.9	13.5	7.5	5	**20AE9P0A0AYNNNC0**	N	C
11	13.5	18	10	7.5	**20AE011A0AYNNNC0**	N	C
17	18.7	25.5	15	10	**20AE017A0AYNNNC0**	N	D
22	25.5	34	20	15	**20AE022A0AYNNNC0**	N	D
27	33	44	25	20	**20AE027A0AYNNNC0**	N	D
32	40.5	54	30	25	**20AE032A0AYNNNC0**	N	D
41	48	64	40	30	**20AE041A0AYNANC0**	N	E
52	61.5	82	50	40	**20AE052A0AYNANC0**	N	E

Wall / Machine Mount - IP66, NEMA/UL Type 4X/12 for Indoor Use with HIM

200...240V AC, Three-Phase Drives

240V AC Input						208V AC Input ‡							
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	with Filter	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.					
2.2	2.4	3.3	0.5	0.33	**20AB2P2C3AYNNNC0**	2.5	2.7	3.7	0.37	0.25	**20AB2P2C3AYNNNC0**	N	B
2.2	2.4	3.3	0.5	0.33	**20AB2P2C3AYNANC0**	2.5	2.7	3.7	0.37	0.25	**20AB2P2C3AYNANC0**	Y	B
4.2	4.8	6.4	1	0.75	**20AB4P2C3AYNNNC0**	4.8	5.5	7.4	0.75	0.55	**20AB4P2C3AYNNNC0**	N	B
4.2	4.8	6.4	1	0.75	**20AB4P2C3AYNANC0**	4.8	5.5	7.4	0.75	0.55	**20AB4P2C3AYNANC0**	Y	B
6.8	9	12	2	1.5	**20AB6P8C3AYNNNC0**	7.8	10.3	13.8	1.5	1.1	**20AB6P8C3AYNNNC0**	N	B
6.8	9	12	2	1.5	**20AB6P8C3AYNANC0**	7.8	10.3	13.8	1.5	1.1	**20AB6P8C3AYNANC0**	Y	B
9.6	10.6	14.4	3	2	**20AB9P6C3AYNNNC0**	11	12.1	16.5	2.2	1.5	**20AB9P6C3AYNNNC0**	N	B
9.6	10.6	14.4	3	2	**20AB9P6C3AYNANC0**	11	12.1	16.5	2.2	1.5	**20AB9P6C3AYNANC0**	Y	B
15.3	17.4	23.2	5	3	**20AB015C3AYNANC0**	17.5	19.2	26.2	4	3	**20AB015C3AYNANC0**	Y	D
22	24.2	33	7.5	5	**20AB022C3AYNANC0**	25.3	27.8	37.9	5.5	4	**20AB022C3AYNANC0**	Y	D
28	33	44	10	7.5	**20AB028C3AYNANC0**	32.2	37.9	50.6	7.5	5.5	**20AB028C3AYNANC0**	Y	D
42	46.2	63	15	10	**20AB042C3AYNANC0**	43	55.5	74	11	7.5	**20AB042C3AYNANC0**	Y	D
54	63	84	20	15	**20AB054C3AYNANC0**	62.1	72.4	96.6	15	11	**20AB054C3AYNANC0**	Y	E
70	81	108	25	20	**20AB070C3AYNANC0**	78.2	93.1	124	18.5	15	**20AB070C3AYNANC0**	Y	E

‡ Drive must be programmed to lower voltage to obtain the currents shown.

380...480V AC, Three-Phase Drives

480V AC Input						400V AC Input							
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	with Filter	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.					
1.1	1.2	1.6	0.5	0.33	**20AD1P1C3AYNNNC0**	1.3	1.4	1.9	0.37	0.25	**20AC1P3C3AYNNNC0**	N	B
1.1	1.2	1.6	0.5	0.33	**20AD1P1C3AYNANC0**	1.3	1.4	1.9	0.37	0.25	**20AC1P3C3AYNANC0**	Y	B
2.1	2.4	3.2	1	0.75	**20AD2P1C3AYNNNC0**	2.1	2.4	3.2	0.75	0.55	**20AC2P1C3AYNNNC0**	N	B
2.1	2.4	3.2	1	0.75	**20AD2P1C3AYNANC0**	2.1	2.4	3.2	0.75	0.55	**20AC2P1C3AYNANC0**	Y	B
3.4	4.5	6	2	1.5	**20AD3P4C3AYNNNC0**	3.5	4.5	6	1.5	1.1	**20AC3P5C3AYNNNC0**	N	B
3.4	4.5	6	2	1.5	**20AD3P4C3AYNANC0**	3.5	4.5	6	1.5	1.1	**20AC3P5C3AYNANC0**	Y	B
5	5.5	7.5	3	2	**20AD5P0C3AYNNNC0**	5	5.5	7.5	2.2	1.5	**20AC5P0C3AYNNNC0**	N	B
5	5.5	7.5	3	2	**20AD5P0C3AYNANC0**	5	5.5	7.5	2.2	1.5	**20AC5P0C3AYNANC0**	Y	B
8	8.8	12	5	3	**20AD8P0C3AYNNNC0**	8.7	9.9	13.2	4	3	**20AC8P7C3AYNNNC0**	N	B
8	8.8	12	5	3	**20AD8P0C3AYNANC0**	8.7	9.9	13.2	4	3	**20AC8P7C3AYNANC0**	Y	B
11	12.1	16.5	7.5	5	**20AD011C3AYNANC0**	11.5	13	17.4	5.5	4	**20AC011C3AYNANC0**	Y	D
14	16.5	22	10	7.5	**20AD014C3AYNANC0**	15	17.2	23.1	7.5	5.5	**20AC015C3AYNANC0**	Y	D
22	24.2	33	15	10	**20AD022C3AYNANC0**	22	24.2	33	11	7.5	**20AC022C3AYNANC0**	Y	D
27	33	44	20	15	**20AD027C3AYNANC0**	30	33	45	15	11	**20AC030C3AYNANC0**	Y	D
34	40.5	54	25	20	**20AD034C3AYNANC0**	37	45	60	18.5	15	**20AC037C3AYNANC0**	Y	D
40	51	68	30	25	**20AD040C3AYNANC0**	43	56	74	22	18.5	**20AC043C3AYNANC0**	Y	D
52	60	80	40	30	**20AD052C3AYNANC0**	60	66	90	30	22	**20AC060C3AYNANC0**	Y	E
65	78	104	50	40	**20AD065C3AYNANC0**	72	90	120	37	30	**20AC072C3AYNANC0**	Y	E

Wall / Machine Mount - IP66, NEMA/UL Type 4X/12 for Indoor Use with HIM (continued)

500...600V AC, Three-Phase Drives

600V AC Input							
Output Amps							
Cont.	1 Min.	3 Sec.	Normal Duty Hp	Heavy Duty Hp	Cat. No.	with Filter	Frame Size
0.9	1	1.4	0.5	0.33	**20AE0P9C3AYNNNC0**	N	B
1.7	1.9	2.6	1	0.75	**20AE1P7C3AYNNNC0**	N	B
2.7	3.6	4.8	2	1	**20AE2P7C3AYNNNC0**	N	B
3.9	4.3	5.8	3	1.5	**20AE3P9C3AYNNNC0**	N	B
6.1	6.7	9.1	5	3	**20AE6P1C3AYNNNC0**	N	B
9	9.9	13.5	7.5	5	**20AE9P0C3AYNNNC0**	N	D
11	13.5	18	10	7.5	**20AE011C3AYNNNC0**	N	D
17	18.7	25.5	15	10	**20AE017C3AYNNNC0**	N	D
22	25.5	34	20	15	**20AE022C3AYNNNC0**	N	D
27	33	44	25	20	**20AE027C3AYNNNC0**	N	D
32	40.5	54	30	25	**20AE032C3AYNNNC0**	N	D
41	48	64	40	30	**20AE041C3AYNANC0**	N	E
52	61.5	82	50	40	**20AE052C3AYNANC0**	N	E

Wall / Machine Mount - IP54, NEMA/UL Type 12, with HIM

200...240V AC, Three-Phase Drives

240V AC Input					208V AC Input ‡							
Output Amps			Normal Duty Hp	Heavy Duty Hp	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	with Filter	Frame Size
Cont.	1 Min.	3 Sec.			Cont.	1 Min.	3 Sec.					
54	63	84	20	15	62.1	72.4	96.6	15	11	**20AB054G3AYNANC0**	Y	E
70	81	108	25	20	78.2	93.1	124	18.5	15	**20AB070G3AYNANC0**	Y	E

‡ Drive must be programmed to lower voltage to obtain the currents shown.

380...480V AC, Three-Phase Drives

480V AC Input						400V AC Input							
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	with Filter	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.					
52	60	80	40	30	**20AD052G3AYNANC0**	60	66	90	30	22	**20AC060G3AYNANC0**	Y	E
65	78	104	50	40	**20AD065G3AYNANC0**	72	90	120	37	30	**20AC072G3AYNANC0**	Y	E

500...600V AC, Three-Phase Drives

600V AC Input							
Output Amps							
Cont.	1 Min.	3 Sec.	Normal Duty Hp	Heavy Duty Hp	Cat. No.	with Filter	Frame Size
41	48	64	40	30	**20AE041G3AYNANC0**	Y	E
52	61.5	82	50	40	**20AE052G3AYNANC0**	Y	E

Flange Mount - Front Chassis = IP20, NEMA/UL Type 1, Heatsink = IP66, NEMA/UL Type 4X/12, No HIM

200...240V AC, Three-Phase Drives

240V AC Input						208V AC Input ‡							
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	with Filter	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.					
2.2	2.4	3.3	0.5	0.33	**20AB2P2F0AYNNNC0**	2.5	2.7	3.7	0.37	0.25	**20AB2P2F0AYNNNC0**	N	A
2.2	2.4	3.3	0.5	0.33	**20AB2P2F0AYNANC0**	2.5	2.7	3.7	0.37	0.25	**20AB2P2F0AYNANC0**	Y	B
4.2	4.8	6.4	1	0.75	**20AB4P2F0AYNNNC0**	4.8	5.5	7.4	0.75	0.55	**20AB4P2F0AYNNNC0**	N	A
4.2	4.8	6.4	1	0.75	**20AB4P2F0AYNANC0**	4.8	5.5	7.4	0.75	0.55	**20AB4P2F0AYNANC0**	Y	B
6.8	9	12	2	1.5	**20AB6P8F0AYNNNC0**	7.8	10.3	13.8	1.5	1.1	**20AB6P8F0AYNNNC0**	N	B
6.8	9	12	2	1.5	**20AB6P8F0AYNANC0**	7.8	10.3	13.8	1.5	1.1	**20AB6P8F0AYNANC0**	Y	B
9.6	10.6	14.4	3	2	**20AB9P6F0AYNNNC0**	11	12.1	16.5	2.2	1.5	**20AB9P6F0AYNNNC0**	N	B
9.6	10.6	14.4	3	2	**20AB9P6F0AYNANC0**	11	12.1	16.5	2.2	1.5	**20AB9P6F0AYNANC0**	Y	B
15.3	17.4	23.2	5	3	**20AB015F0AYNANC0**	17.5	19.2	26.2	4	3	**20AB015F0AYNANC0**	Y	C
22	24.2	33	7.5	5	**20AB022F0AYNANC0**	25.3	27.8	37.9	5.5	4	**20AB022F0AYNANC0**	Y	D
28	33	44	10	7.5	**20AB028F0AYNANC0**	32.2	37.9	50.6	7.5	5.5	**20AB028F0AYNANC0**	Y	D
42	46.2	63	15	10	**20AB042F0AYNANC0**	43	55.5	74	11	7.5	**20AB042F0AYNANC0**	Y	D
54	63	84	20	15	**20AB054F0AYNANC0**	62.1	72.4	96.6	15	11	**20AB054F0AYNANC0**	Y	E
70	81	108	25	20	**20AB070F0AYNANC0**	78.2	93.1	124	18.5	15	**20AB070F0AYNANC0**	Y	E

‡ Drive must be programmed to lower voltage to obtain the currents shown.

380...480V AC, Three-Phase Drives

480V AC Input						400V AC Input							
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	with Filter	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.					
1.1	1.2	1.6	0.5	0.33	**20AD1P1F0AYNNNC0**	1.3	1.4	1.9	0.37	0.25	**20AC1P3F0AYNNNC0**	N	A
1.1	1.2	1.6	0.5	0.33	**20AD1P1F0AYNANC0**	1.3	1.4	1.9	0.37	0.25	**20AC1P3F0AYNANC0**	Y	B
2.1	2.4	3.2	1	0.75	**20AD2P1F0AYNNNC0**	2.1	2.4	3.2	0.75	0.55	**20AC2P1F0AYNNNC0**	N	A
2.1	2.4	3.2	1	0.75	**20AD2P1F0AYNANC0**	2.1	2.4	3.2	0.75	0.55	**20AC2P1F0AYNANC0**	Y	B
3.4	4.5	6	2	1.5	**20AD3P4F0AYNNNC0**	3.5	4.5	6	1.5	1.1	**20AC3P5F0AYNNNC0**	N	A
3.4	4.5	6	2	1.5	**20AD3P4F0AYNANC0**	3.5	4.5	6	1.5	1.1	**20AC3P5F0AYNANC0**	Y	B
5	5.5	7.5	3	2	**20AD5P0F0AYNNNC0**	5	5.5	7.5	2.2	1.5	**20AC5P0F0AYNNNC0**	N	B
5	5.5	7.5	3	2	**20AD5P0F0AYNANC0**	5	5.5	7.5	2.2	1.5	**20AC5P0F0AYNANC0**	Y	B
8	8.8	12	5	3	**20AD8P0F0AYNNNC0**	8.7	9.9	13.2	4	3	**20AC8P7F0AYNNNC0**	N	B
8	8.8	12	5	3	**20AD8P0F0AYNANC0**	8.7	9.9	13.2	4	3	**20AC8P7F0AYNANC0**	Y	B
11	12.1	16.5	7.5	5	**20AD011F0AYNANC0**	11.5	13	17.4	5.5	4	**20AC011F0AYNANC0**	Y	C
14	16.5	22	10	7.5	**20AD014F0AYNANC0**	15	17.2	23.1	7.5	5.5	**20AC015F0AYNANC0**	Y	C
22	24.2	33	15	10	**20AD022F0AYNANC0**	22	24.2	33	11	7.5	**20AC022F0AYNANC0**	Y	D
27	33	44	20	15	**20AD027F0AYNANC0**	30	33	45	15	11	**20AC030F0AYNANC0**	Y	D
34	40.5	54	25	20	**20AD034F0AYNANC0**	37	45	60	18.5	15	**20AC037F0AYNANC0**	Y	D
40	51	68	30	25	**20AD040F0AYNANC0**	43	56	74	22	18.5	**20AC043F0AYNANC0**	Y	D
52	60	80	40	30	**20AD052F0AYNANC0**	60	66	90	30	22	**20AC060F0AYNANC0**	Y	E
65	78	104	50	40	**20AD065F0AYNANC0**	72	90	120	37	30	**20AC072F0AYNANC0**	Y	E

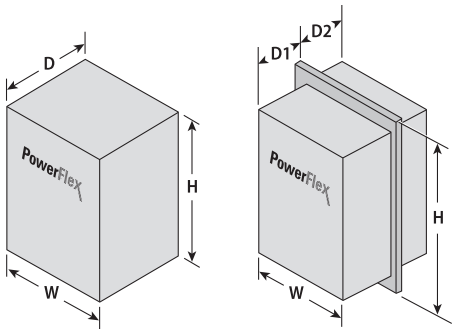
Flange Mount - Front Chassis = IP20, NEMA/UL Type 1, Heatsink = IP66, NEMA/UL Type 4X/12, No HIM
(continued)

500...600V AC, Three-Phase Drives

600V AC Input							
Output Amps							
Cont.	1 Min.	3 Sec.	Normal Duty Hp	Heavy Duty Hp	Cat. No.	with Filter	Frame Size
0.9	1	1.4	0.5	0.33	**20AE0P9F0AYNNNC0**	N	A
1.7	1.9	2.6	1	0.75	**20AE1P7F0AYNNNC0**	N	A
2.7	3.6	4.8	2	1	**20AE2P7F0AYNNNC0**	N	A
3.9	4.3	5.8	3	1.5	**20AE3P9F0AYNNNC0**	N	B
6.1	6.7	9.1	5	3	**20AE6P1F0AYNNNC0**	N	B
9	9.9	13.5	7.5	5	**20AE9P0F0AYNNNC0**	N	C
11	13.5	18	10	7.5	**20AE011F0AYNNNC0**	N	C
17	18.7	25.5	15	10	**20AE017F0AYNNNC0**	N	D
22	25.5	34	20	15	**20AE022F0AYNNNC0**	N	D
27	33	44	25	20	**20AE027F0AYNNNC0**	N	D
32	40.5	54	30	25	**20AE032F0AYNNNC0**	N	D
41	48	64	40	30	**20AE041F0AYNANC0**	N	E
52	61.5	82	50	40	**20AE052F0AYNANC0**	N	E

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP20, NEMA/UL Type 1

Frame	H	W	D	Weight ★
A	225.7 (8.89)	122.4 (4.82)	179.8 (7.08)	2.71 (6.0)
B	234.6 (9.24)	171.7 (6.76)	179.8 (7.08)	3.60 (7.9)
C	300.0 (11.81)	185.0 (7.28)	179.8 (7.08)	6.89 (15.2)
D	350.0 (13.78)	219.9 (8.66)	179.8 (7.08)	9.25 (20.4)
E	555.8 (21.88)	280.3 (11.04)	207.1 (8.15)	18.60 (41.0)

★ Weights include HIM and I/O.

Flange Mount

Frame	H	W	D1	D2	Weight ★
A	225.8 (8.89)	156.0 (6.14)	123.0 (4.84)	55.6 (2.19)	2.71 (6.0)
B	234.6 (9.24)	205.2 (8.08)	123.0 (4.84)	55.6 (2.19)	3.60 (7.9)
C	300.0 (11.81)	219.0 (8.62)	123.0 (4.84)	55.6 (2.19)	6.89 (15.2)
D	350.0 (13.78)	248.4 (9.78)	123.0 (4.84)	55.6 (2.19)	9.25 (20.4)
E	555.8 (21.88)	280.3 (11.04)	117.2 (4.61)	89.9 (3.54)	18.60 (41.0)

★ Weights include HIM and I/O.

IP66, NEMA/UL Type 4X/12 for Indoor Use

Frame	H	W	D	Weight ★
B	239.8 (9.44)	171.7 (6.76)	203.3 (8.00)	3.61 (8.0)
D	350.0 (13.78)	219.9 (8.66)	210.7 (8.29)	9.13 (20.1)
E	555.8 (21.88)	280.3 (11.04)	219.8 (8.65)	18.6 (41.0)

★ Weights include HIM and I/O.

PowerFlex 700 AC Drive

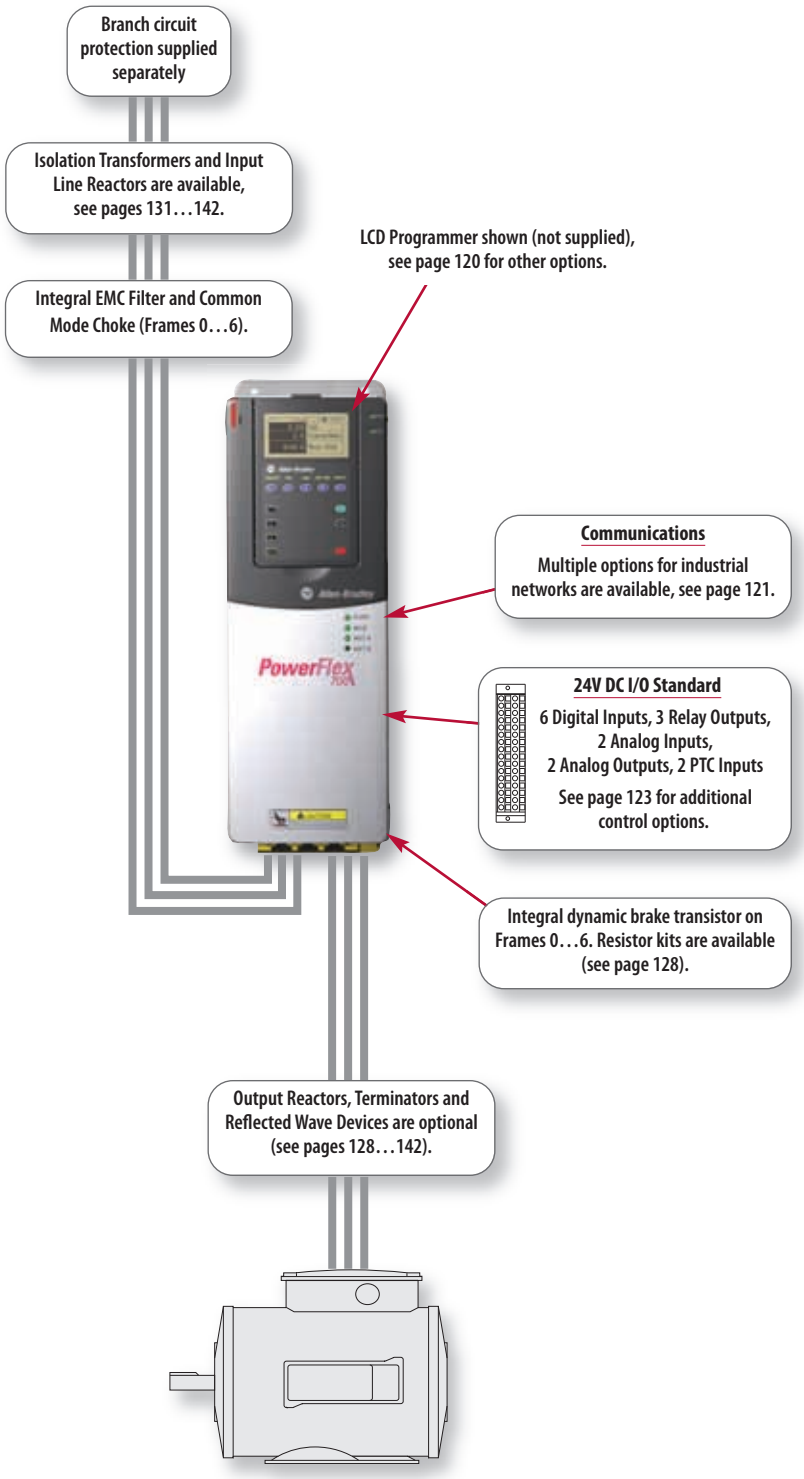
The PowerFlex 700 offers outstanding performance in an easy-to-use drive that covers a wide range of horsepower ratings. This drive is designed to control three-phase induction motors in applications with requirements ranging from the simplest speed control to the most demanding torque control. The PowerFlex 700 offers application specific features and parameters for lifting, oil wells, and speed and positioning applications.

PowerFlex 700 at a glance

Ratings	
200…240V:	0.37…66 kW / 0.5…100 Hp / 2.2…260 A
380…480V:	0.37…500 kW / 0.5…700 Hp / 1.1…875 A
500…600V:	1…150 Hp / 1.7…144 A
690V:	45…132 kW / 52…142 A
Motor Control	• V/Hz Control • Sensorless Vector Control • Vector Control with FORCE Technology (with and without encoder)
Enclosures	• IP00, NEMA/UL Type Open • IP20, NEMA/UL Type 1 • IP54, NEMA 12 • Flange Mount
Additional Features	• Speed and torque control with and without encoder feedback • Position indexing and speed profiling • Parameter linking functionality • TorqProve for lifting applications • Adjustable voltage for non-motor loads • Position regulator and 16 step indexing table (with encoder feedback) • Custom Firmware including Pump Off for oil well applications and Cascade fan/pump ‡
Certifications	• ABS (Frames 0…6) • ATEX Certified • C-Tick • c-UL, UL • CE ★ • IEC (Designed to Meet) • Lloyd's Register (Frames 0…6) • RINA Certified (Frames 0…6) • SEMI F47 (Frames 0…6)
Options	See pages 120…142

★ 600V class drives below 77 Amps (Frames 0-4) are declared to meet the Low Voltage Directive.

‡ Custom firmware is available factory installed or as an option kit. See page 123 for further information.


Branch circuit protection supplied separately
Isolation Transformers and Input Line Reactors are available, see pages 131…142.
Integral EMC Filter and Common Mode Choke (Frames 0…6).
LCD Programmer shown (not supplied), see page 120 for other options.
PowerFlex
Communications
Multiple options for industrial networks are available, see page 121.
24V DC I/O Standard
6 Digital Inputs, 3 Relay Outputs, 2 Analog Inputs, 2 Analog Outputs, 2 PTC Inputs
See page 123 for additional control options.
Integral dynamic brake transistor on Frames 0…6. Resistor kits are available (see page 128).
Output Reactors, Terminators and Reflected Wave Devices are optional (see pages 128…142).

Additional Information

PowerFlex 700 Technical Data, publication 20B-TD001
PowerFlex 700 User Manual, publication 20B-UM002

Catalog Number Explanation

20B	D	2P1	A	0	A	Y	N	A	N	C	0
	Voltage Rating	Rating	Enclosure			Brake IGBT		Filter Option		Control & I/O C = 24V D = 115V	

Product Selection

Wall Mount - IP20, NEMA/UL Type 1

200…240V AC, Three-Phase Drives

240V AC Input						208V AC Input ★						Frame Size
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
2.2	2.4	3.3	0.5	0.33	**20BB2P2A0AYNBNC0**	2.5	2.8	3.8	0.37	–	**20BB2P2A0AYNBNC0**	0
4.2	4.8	6.4	1	0.75	**20BB4P2A0AYNBNC0**	4.8	5.6	7	0.75	0.37	**20BB4P2A0AYNBNC0**	0
6.8	9	12	2	1.5	**20BB6P8A0AYNBNC0**	7.8	10.4	13.8	1.5	0.75	**20BB6P8A0AYNBNC0**	1
9.6	10.6	14.4	3	2	**20BB9P6A0AYNBNC0**	11	12.1	17	2.2	1.5	**20BB9P6A0AYNBNC0**	1
15.3	16.8	23	5	3	**20BB015A0AYNBNC0**	17.5	19.3	26.3	4	2.2	**20BB015A0AYNBNC0**	1
22	24.2	33	7.5	5	**20BB022A0AYNBNC0**	25.3	27.8	38	5.5	4	**20BB022A0AYNBNC0**	1
28	33	44	10	7.5	**20BB028A0AYNBNC0**	32.2	38	50.6	7.5	5.5	**20BB028A0AYNBNC0**	2
42	46.2	63	15	10	**20BB042A0AYNBNC0**	48.3	53.1	72.5	11	7.5	**20BB042A0AYNBNC0**	3
52	63	80	20	15	**20BB052A0AYNBNC0**	56	64	86	15	11	**20BB052A0AYNBNC0**	3
70	78	105	25	20	**20BB070A0ANNANC0**	78.2	86	117.3	18.5	15	**20BB070A0ANNANC0**	4 ♣
80	105	136	30	25	**20BB080A0ANNANC0**	92	117.3	156.4	22	18.5	**20BB080A0ANNANC0**	4 ♣
104 (80) ‡	115 (120)	175 (160)	40	30	**20BB104A0ANNANC0**	120 (92)	132 (138)	175 (175)	30	22	**20BB104A0ANNANC0**	5 ♣
130 (104) ‡	143 (156)	175 (175)	50	40	**20BB130A0ANNANC0**	130 (104)	143 (156)	175 (175)	37	30	**20BB130A0ANNANC0**	5 ♣
154 (130) ‡	169 (195)	231 (260)	60	50	**20BB154A0ANNANC0**	177 (150)	195 (225)	266 (300)	45	37	**20BB154A0ANNANC0**	6 ♣
192 (154) ‡	211 (231)	288 (308)	75	60	**20BB192A0ANNANC0**	221 (177)	243 (266)	308 (308)	55	45	**20BB192A0ANNANC0**	6 ♣
260 (205) ‡	286 (305)	390 (410)	100	75	**20BB260A0ANNANC0**	260 (205)	286 (305)	390 (410)	66	55	**20BB260A0ANNANC0**	6 ♣

★ Drive must be programmed to lower voltage to obtain the currents shown.
‡ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
♣ Also available with internal Brake IGBT (20BxxxxA0A **Y** NANC0).

Wall Mount - IP20, NEMA/UL Type 1 (continued)

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						Frame Size
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
1.1	1.2	1.6	0.5	0.33	**20BD1P1A0AYNANC0**	1.3	1.4	1.9	0.37	0.25	**20BC1P3A0AYNANC0**	0
2.1	2.4	3.2	1	0.75	**20BD2P1A0AYNANC0**	2.1	2.4	3.2	0.75	0.55	**20BC2P1A0AYNANC0**	0
3.4	4.5	6	2	1.5	**20BD3P4A0AYNANC0**	3.5	4.5	6	1.5	0.75	**20BC3P5A0AYNANC0**	0
5	5.5	7.5	3	2	**20BD5P0A0AYNANC0**	5	5.5	7.5	2.2	1.5	**20BC5P0A0AYNANC0**	0
8	8.8	12	5	3	**20BD8P0A0AYNANC0**	8.7	9.9	13.2	4	2.2	**20BC8P7A0AYNANC0**	0
11	12.1	16.5	7.5	5	**20BD011A0AYNANC0**	11.5	13	17.4	5.5	4	**20BC011A0AYNANC0**	0
14	16.5	22	10	7.5	**20BD014A0AYNANC0**	15	17.2	23.1	7.5	5.5	**20BC015A0AYNANC0**	1
22	24.2	33	15	10	**20BD022A0AYNANC0**	22	24.2	33	11	7.5	**20BC022A0AYNANC0**	1
27	33	44	20	15	**20BD027A0AYNANC0**	30	33	45	15	11	**20BC030A0AYNANC0**	2
34	40.5	54	25	20	**20BD034A0AYNANC0**	37	45	60	18.5	15	**20BC037A0AYNANC0**	2
40	51	68	30	25	**20BD040A0AYNANC0**	43	56	74	22	18.5	**20BC043A0AYNANC0**	3
52	60	80	40	30	**20BD052A0AYNANC0**	56	64	86	30	22	**20BC056A0AYNANC0**	3
65	78	104	50	40	**20BD065A0AYNANC0**	72	84	112	37	30	**20BC072A0AYNANC0**	3
77 (65) ‡	85 (98)	116 (130)	60	50	**20BD077A0ANNANC0**	85 (72)	94 (108)	128 (144)	45	37	**20BC085A0ANNANC0**	4 ♣
96 (77) ‡	106 (116)	144 (154)	75	60	**20BD096A0ANNANC0**	105 (85)	116 (128)	158 (170)	55	45	**20BC105A0ANNANC0**	5 ♣
125 (96) ‡	138 (144)	163 (168)	100	75	**20BD125A0ANNANC0**	125 (96)	138 (144)	163 (168)	55	45	**20BC125A0ANNANC0**	5 ♣
–	–	–	–	–	**–**	140 (105)	154 (157)	190 (190)	75	55	**20BC140A0ANNANC0**	5 ♣
156 (125) ‡	172 (188)	233 (250)	125	100	**20BD156A0ANNANC0**	170 (140)	187 (210)	255 (280)	90	75	**20BC170A0ANNANC0**	6 ♣
180 (156) ‡	198 (234)	270 (312)	150	125	**20BD180A0ANNANC0**	205 (170)	220 (255)	289 (313)	110	90	**20BC205A0ANNANC0**	6 ♣
248 (180) ‡	273 (270)	372 (360)	200	150	**20BD248A0ANNANC0**	260 (205)	286 (308)	390 (410)	132	110	**20BC260A0ANNANC0**	6 ♣
292 (263) ‡	322 (395)	438 (526)	250	200	**20BD292A0ANNNNC0**	292 (263)	322 (395)	438 (526)	160	150	**20BC292A0ANNNNC0**	7
325 (325) ‡	358 (488)	488 (650)	250	250	**20BD325A0ANNNNC0**	325 (325)	358 (488)	488 (650)	180	180	**20BC325A0ANNNNC0**	7
365 (325) ‡	402 (488)	548 (650)	300	250	**20BD365A0ANNNNC0**	365 (325)	402 (488)	548 (650)	200	180	**20BC365A0ANNNNC0**	8
415 (365) ‡	457 (548)	623 (730)	350	300	**20BD415A0ANNNNC0**	415 (365)	457 (548)	623 (730)	240	200	**20BC415A0ANNNNC0**	8
481 (415) ‡	530 (623)	722 (830)	400	350	**20BD481A0ANNNNC0**	481 (415)	530 (623)	722 (830)	280	240	**20BC481A0ANNNNC0**	8
535 (481) ‡	589 (722)	803 (962)	450	400	**20BD535A0ANNNNC0**	535 (481)	589 (722)	803 (962)	300	280	**20BC535A0ANNNNC0**	8
600 (535) ‡	660 (803)	900 (1070)	500	450	**20BD600A0ANNNNC0**	600 (535)	660 (803)	900 (1070)	350	300	**20BC600A0ANNNNC0**	8
730 (600) ‡	803 (900)	1095 (1200)	600	500	**20BD730A0ANNNNC0**	730 (600)	803 (900)	1095 (1200)	400	350	**20BC730A0ANNNNC0**	9
875 (700) ‡	963 (1050)	1313 (1400)	700	600	**20BD875A0ANNNNC0**	875 (700)	963 (1050)	1313 (1400)	500	400	**20BC875A0ANNNNC0**	10

‡ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

♣ Also available with internal Brake IGBT (20BxxxxA0A **Y** NANC0).

500…690V AC, Three-Phase Drives

500…600V AC Input						690V AC Input						
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
1.7	2	2.6	1	0.5	**20BE1P7A0AYNANC0**	–	–	–	–	–	**–**	0
2.7	3.6	4.8	2	1	**20BE2P7A0AYNANC0**	–	–	–	–	–	**–**	0
3.9	4.3	5.9	3	2	**20BE3P9A0AYNANC0**	–	–	–	–	–	**–**	0
6.1	6.7	9.2	5	3	**20BE6P1A0AYNANC0**	–	–	–	–	–	**–**	0
9	9.9	13.5	7.5	5	**20BE9P0A0AYNANC0**	–	–	–	–	–	**–**	0
11	13.5	18	10	7.5	**20BE011A0AYNANC0**	–	–	–	–	–	**–**	1
17	18.7	25.5	15	10	**20BE017A0AYNANC0**	–	–	–	–	–	**–**	1
22	25.5	34	20	15	**20BE022A0AYNANC0**	–	–	–	–	–	**–**	2
27	33	44	25	20	**20BE027A0AYNANC0**	–	–	–	–	–	**–**	2
32	40.5	54	30	25	**20BE032A0AYNANC0**	–	–	–	–	–	**–**	3
41	48	64	40	30	**20BE041A0AYNANC0**	–	–	–	–	–	**–**	3
52	61.5	82	50	40	**20BE052A0AYNANC0**	52 (46)	57 (69)	78 (92)	45	37.5	**20BF052A0ANNANC0**	3 §
62	78	104	60	50	**20BE062A0ANNANC0**	60 (52)	66 (78)	90 (104)	55	45	**20BF060A0ANNANC0**	4 §♣
77 (63) ‡	85 (94)	116 (126)	75	60	**20BE077A0ANNANC0**	82 (60)	90 (90)	123 (120)	75	55	**20BF082A0ANNANC0**	5 ♣
99 (77) ‡	109 (116)	126 (138)	100	75	**20BE099A0ANNANC0**	98 (82)	108 (123)	127 (140)	90	75	**20BF098A0ANNANC0**	5 ♣
125 (99) ‡	138 (149)	188 (198)	125	100	**20BE125A0ANNANC0**	119 (98)	131 (147)	179 (196)	110	90	**20BF119A0ANNANC0**	6 ♣
144 (125) ‡	158 (188)	216 (250)	150	125	**20BE144A0ANNANC0**	142 (119)	156 (179)	213 (238)	132	110	**20BF142A0ANNANC0**	6 ♣

‡ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
§ 690V AC input drives are Frame 5.
♣ Also available with internal Brake IGBT (20BxxxxA0A **Y** NANC0).

Open/Flange Mount
Front = IP00, NEMA/UL Type Open, Back/Heatsink = IP54, NEMA 12

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						
Output Amps ‡			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps ‡			Normal Duty kW	Heavy Duty kW	Cat. No.	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
96 (77)	106 (116)	144 (154)	75	60	**20BD096F0ANNANC0**	105 (85)	116 (128)	158 (170)	55	45	**20BC105F0ANNANC0**	5 ♣
125 (96)	138 (144)	163 (168)	100	75	**20BD125F0ANNANC0**	125 (96)	138 (144)	163 (168)	55	45	**20BC125F0ANNANC0**	5 ♣
–	–	–	–	–	**–**	140 (105)	154 (157)	190 (190)	75	55	**20BC140F0ANNANC0**	5 ♣
156 (125)	172 (188)	233 (250)	125	100	**20BD156F0ANNANC0**	170 (140)	187 (210)	255 (280)	90	75	**20BC170F0ANNANC0**	6 ♣
180 (156)	198 (234)	270 (312)	150	125	**20BD180F0ANNANC0**	205 (170)	220 (255)	289 (313)	110	90	**20BC205F0ANNANC0**	6 ♣
248 (180)	273 (270)	372 (360)	200	150	**20BD248F0ANNANC0**	260 (205)	286 (308)	390 (410)	132	110	**20BC260F0ANNANC0**	6 ♣
292 (263)	322 (395)	438 (526)	250	200	**20BD292N0ANNNNC0**	292 (263)	322 (395)	438 (526)	160	150	**20BC292N0ANNNNC0**	7
325 (325)	358 (488)	488 (650)	250	250	**20BD325N0ANNNNC0**	325 (325)	358 (488)	488 (650)	180	180	**20BC325N0ANNNNC0**	7
365 (325)	402 (488)	548 (650)	300	250	**20BD365N0ANNNNC0**	365 (325)	402 (488)	548 (650)	200	180	**20BC365N0ANNNNC0**	8
415 (365)	457 (548)	623 (730)	350	300	**20BD415N0ANNNNC0**	415 (365)	457 (548)	623 (730)	240	200	**20BC415N0ANNNNC0**	8
481 (415)	530 (623)	722 (830)	400	350	**20BD481N0ANNNNC0**	481 (415)	530 (623)	722 (830)	280	240	**20BC481N0ANNNNC0**	8
535 (481)	589 (722)	803 (962)	450	400	**20BD535N0ANNNNC0**	535 (481)	589 (722)	803 (962)	300	280	**20BC535N0ANNNNC0**	8
600 (535)	660 (803)	900 (1070)	500	450	**20BD600N0ANNNNC0**	600 (535)	660 (803)	900 (1070)	350	300	**20BC600N0ANNNNC0**	8
730 (600)	803 (900)	1095 (1200)	600	500	**20BD730N0ANNNNC0**	730 (600)	803 (900)	1095 (1200)	400	350	**20BC730N0ANNNNC0**	9
875 (700)	963 (1050)	1313 (1400)	700	600	**20BD875N0ANNNNC0**	875 (700)	963 (1050)	1313 (1400)	500	400	**20BC875N0ANNNNC0**	10

‡ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
♣ Also available with internal Brake IGBT (20BxxxxF0A **Y** NANC0).

Roll-In
Front = IP00, NEMA/UL Type Open, Back/Heatsink = IP54, NEMA 12

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						Frame Size
Output Amps ‡			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps ‡			Normal Duty kW	Heavy Duty kW	Cat. No.	
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
365 (325)	402 (488)	548 (650)	300	250	**20BD365U0ANNNNC0**	365 (325)	402 (488)	548 (650)	200	180	**20BC365U0ANNNNC0**	8
415 (365)	457 (548)	623 (730)	350	300	**20BD415U0ANNNNC0**	415 (365)	457 (548)	623 (730)	240	200	**20BC415U0ANNNNC0**	8
481 (415)	530 (623)	722 (830)	400	350	**20BD481U0ANNNNC0**	481 (415)	530 (623)	722 (830)	280	240	**20BC481U0ANNNNC0**	8
535 (481)	589 (722)	803 (962)	450	400	**20BD535U0ANNNNC0**	535 (481)	589 (722)	803 (962)	300	280	**20BC535U0ANNNNC0**	8
600 (535)	660 (803)	900 (1070)	500	450	**20BD600U0ANNNNC0**	600 (535)	660 (803)	900 (1070)	350	300	**20BC600U0ANNNNC0**	8
730 (600)	803 (900)	1095 (1200)	600	500	**20BD730U0ANNNNC0**	730 (600)	803 (900)	1095 (1200)	400	350	**20BC730U0ANNNNC0**	9

‡ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

Stand-Alone/Wall Mount - IP54, NEMA 12

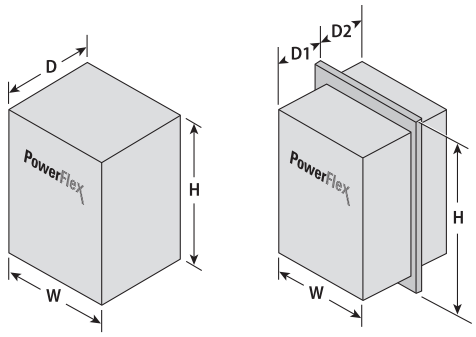
380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						Frame Size
Output Amps ‡			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps ‡			Normal Duty kW	Heavy Duty kW	Cat. No.	
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
96 (77)	106 (116)	144 (154)	75	60	**20BD096G0ANNANC0**	105 (85)	116 (128)	158 (170)	55	45	**20BC105G0ANNANC0**	5 ♣
125 (96)	138 (144)	163 (168)	100	75	**20BD125G0ANNANC0**	125 (96)	138 (144)	163 (168)	55	45	**20BC125G0ANNANC0**	5 ♣
–	–	–	–	–	**–**	140 (105)	154 (157)	190 (190)	75	55	**20BC140G0ANNANC0**	5 ♣
156 (125)	172 (188)	233 (250)	125	100	**20BD156G0ANNANC0**	170 (140)	187 (210)	255 (280)	90	75	**20BC170G0ANNANC0**	6 ♣
180 (156)	198 (234)	270 (312)	150	125	**20BD180G0ANNANC0**	205 (170)	220 (255)	289 (313)	110	90	**20BC205G0ANNANC0**	6 ♣
248 (180)	273 (270)	372 (360)	200	150	**20BD248G0ANNANC0**	260 (205)	286 (308)	390 (410)	132	110	**20BC260G0ANNANC0**	6 ♣

‡ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
♣ Also available with internal Brake IGBT (20BxxxxG0A **Y** NANC0).

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP20, NEMA/UL Type 1

Frame	H	W	D	Weight ★
0	336.0 (13.23)	110.0 (4.33)	200.0 (7.87)	5.22 (11.5)
1	336.0 (13.23)	135.0 (5.31)	200.0 (7.87)	7.03 (15.5)
2	342.5 (13.48)	222.0 (8.74)	200.0 (7.87)	12.52 (27.6)
3	517.5 (20.37)	222.0 (8.74)	200.0 (7.87)	18.55 (40.9)
4	758.8 (29.87)	220.0 (8.66)	201.7 (7.94)	24.49 (54.0)
5	644.5 (25.37) ‡	308.9 (12.16)	275.4 (10.84)	37.19 (82.0)
6	850.0 (33.46)	403.9 (15.90)	275.5 (10.85)	71.44 (157.5) ♣
7	1498.6 (59.00)	514.4 (20.25)	406.9 (16.02)	170.00 (375.0)
8	2373.9 (93.46)	757.7 (29.83)	889.0 (35.00) §	509.00 (1122.0)
9	2373.9 (93.46)	757.7 (29.83)	1016.0 (40.00)	526.00 (1159.0)
10 (AC Input)	2373.9 (93.46)	1267.7 (49.91)	889.0 (35.00)	867.00 (1912.0)
10 (DC Input)	2373.9 (93.46)	757.7 (29.83)	889.0 (35.00)	468.00 (1032.0)

★ Weights include HIM and I/O.
‡ When using the supplied junction box (100 Hp drives Only), add an additional 45.1 mm (1.78 in.) to this dimension.
§ Depth for 20Bx535, 600 is 1016.0 (40.00).
♣ Add 13.60 kg (30.0 lbs.) for the following drives; 20BB260, 20BC260 and 20BD248.

Open/Flange Mount (Front = IP00, NEMA/UL Type Open, Back/Heatsink = IP54, NEMA 12)

Frame	H	W	D1	D2	Weight
5 ♣	1061.0 (41.77)	500.0 (19.69)	303.6 (11.95)	97.0 (3.82)	61.69 (136.0)
6 ♣	1100.0 (43.30)	584.0 (23.00)	294.7 (11.60)	131.6 (5.20)	99.79 (220.0)
7	1498.6 (59.00)	514.4 (20.25)	218.2 (8.59)	134.6 (5.30)	146.96 (324.0)
8	2275.8 (89.60)	757.7 (29.83)	345.4 (13.60)	254.0 (10.00) Δ	384.19 (847.0)
9	2275.8 (89.60)	757.7 (29.83)	400.8 (15.78)	381.0 (15.00)	400.98 (884.0)
10 (AC Input)	2275.8 (89.60)	1267.7 (49.91)	338.6 (13.30)	252.7 (9.95)	531.61 (1172.0)
10 (DC Input)	2275.8 (89.60)	757.7 (29.83)	338.6 (13.30)	252.7 (9.95)	304.81 (672.0)

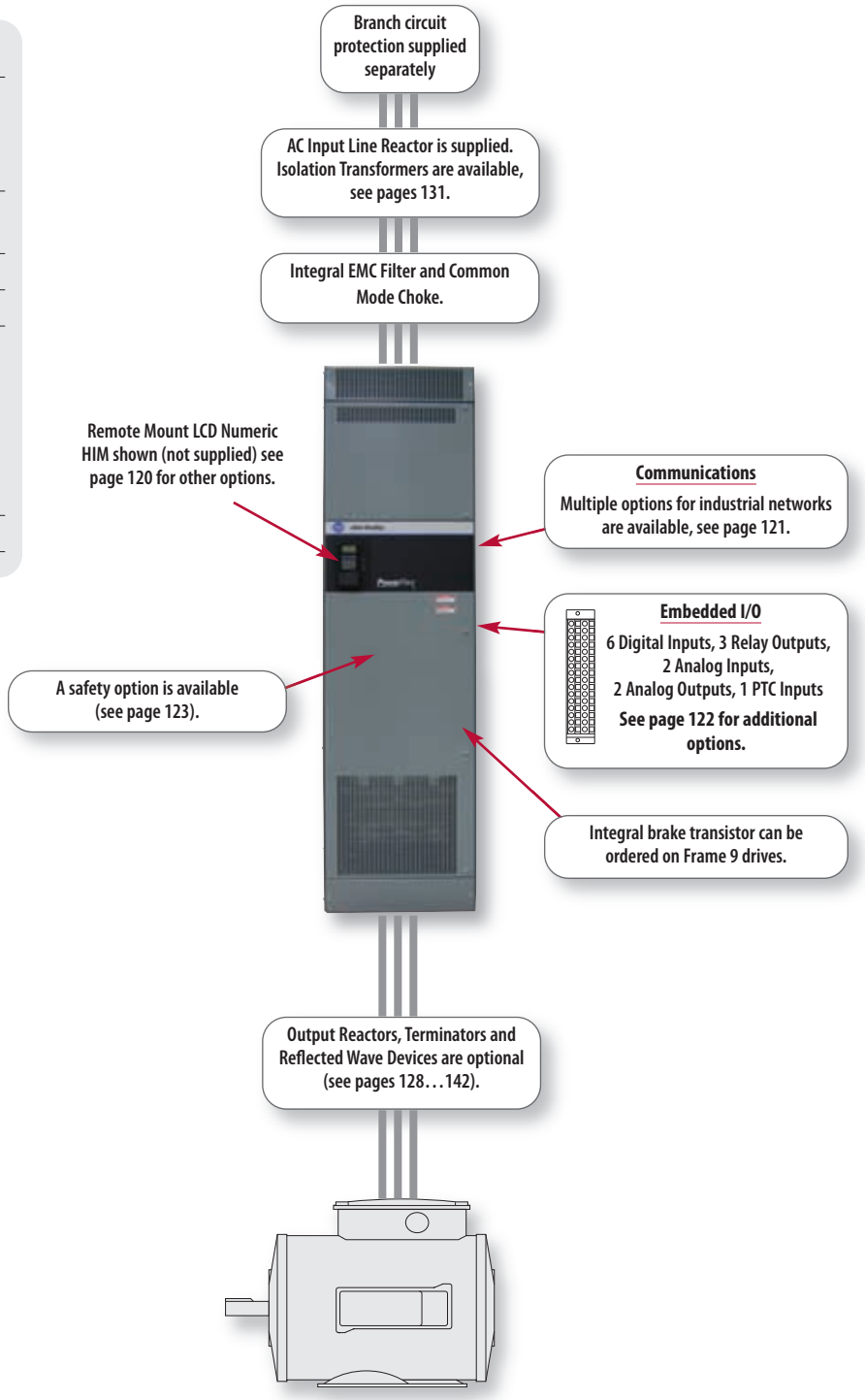
♣ 400…690V drives only.
Δ Depth for 20Bx535, 600 is 381.0 (15.00).

PowerFlex 700H AC Drive

The PowerFlex 700H drive is ideal for high power applications requiring speed control performance. This drive provides excellent torque at low speeds for demanding speed control applications and has configurable control modes for a wide variety of applications. The PowerFlex 700H also has an ATEX certified option for drives that operate in potentially explosive environments.

PowerFlex 700H at a glance

Ratings	
380…480V:	132…1200 kW / 200…1900 Hp / 261…2150 A
500…600V:	150…2400 Hp / 170…2250 A
690V:	160…2300 kW / 170…2250 A
Motor Control	• V/Hz Control • Sensorless Vector Control
Enclosures	IP21, NEMA Type 1
Safety	DriveGuard Safe Torque-Off / EN954-1 Cat. 3
Certifications	• ATEX Certified with Safe Torque-Off • C-Tick • c-UL, UL • CE - with Rittal Enclosure • IEC (Designed to Meet) - with Rittal Enclosure • TÜV FS ISO/EN13849-1 (EN954-1) with Safe Torque-Off option
Options	See pages 120…142


Branch circuit protection supplied separately
AC Input Line Reactor is supplied. Isolation Transformers are available, see pages 131.
Integral EMC Filter and Common Mode Choke.
Remote Mount LCD Numeric HIM shown (not supplied) see page 120 for other options.
Communications
Multiple options for industrial networks are available, see page 121.
Embedded I/O
6 Digital Inputs, 3 Relay Outputs, 2 Analog Inputs, 2 Analog Outputs, 1 PTC Inputs
See page 122 for additional options.
A safety option is available (see page 123).
Integral brake transistor can be ordered on Frame 9 drives.
Output Reactors, Terminators and Reflected Wave Devices are optional (see pages 128…142).

Additional Information

PowerFlex 700H Technical Data, publication 20C-TD001
PowerFlex 700H Installation Manual, publication PFLEX-IN006
PowerFlex 700H Programming Manual, publication 20C-PM001

Catalog Number Explanation

20C	D	261	A	0	A	N	N	B	N	A	0
	Voltage Rating	Rating	Enclosure			Brake IGBT		Filter Option		I/O Options	

Product Selection

IP21, NEMA Type 1

380…480V AC, Three-Phase Drives with 24V DC I/O

480V AC Input						400V AC Input						Frame Size
Output Amps ★			Normal Duty Hp	Heavy Duty Hp	Cat. No. ♣	Output Amps ★			Normal Duty kW	Heavy Duty kW	Cat. No. ♣	
Cont.	1 Min.	2 Sec. ‡				Cont.	1 Min.	2 Sec. ‡				
261 (205)	287 (308)	410 (410)	200	150	**20CD261A0ANNBNA0**	261 (205)	287 (308)	410 (410)	132	110	**20CC261A0ANNBNA0**	9
300 (245)	330 (368)	450 (490)	250	200	**20CD300A0ANNBNA0**	300 (245)	330 (368)	450 (490)	160	132	**20CC300A0ANNBNA0**	9
385 (300)	424 (450)	600 (600)	300	250	**20CD385A0ANNBNA0**	385 (300)	424 (450)	600 (600)	200	160	**20CC385A0ANNBNA0**	10
460 (385)	506 (578)	770 (770)	350	300	**20CD460A0ANNBNA0**	460 (385)	506 (578)	770 (770)	250	200	**20CC460A0ANNBNA0**	10
500 (420)	550 (630)	750 (840)	450	350	**20CD500A0ANNBNA0**	500 (420)	550 (630)	750 (840)	250	250	**20CC500A0ANNBNA0**	10
590 (520)	649 (780)	956 (956)	500	450	**20CD590A0ANNBNA0**	590 (520)	649 (780)	956 (956)	315	250	**20CC590A0ANNBNA0**	11
650 (590)	715 (885)	1062 (1062)	500	500	**20CD650A0ANNBNA0**	650 (590)	715 (885)	1062 (1062)	355	315	**20CC650A0ANNBNA0**	11
730 (650)	803 (975)	1095 (1170)	600	500	**20CD730A0ANNBNA0**	730 (650)	803 (975)	1095 (1170)	400	355	**20CC730A0ANNBNA0**	11
820 (730)	902 (1095)	1230 (1314)	700	600	**20CD820A0ANNBNA0**	820 (730)	902 (1095)	1230 (1314)	450	400	**20CC820A0ANNBNA0**	12
920 (820)	1012 (1230)	1380 (1476)	800	700	**20CD920A0ANNBNA0**	920 (820)	1012 (1230)	1380 (1476)	500	450	**20CC920A0ANNBNA0**	12
1030 (920)	1133 (1370)	1555 (1600)	900	800	**20CD1K0A0ANNBNA0**	1030 (920)	1133 (1370)	1555 (1600)	560	500	**20CC1K0A0ANNBNA0**	12
1150 (1030)	1265 (1545)	1620 (1620)	1000	900	**20CD1K1A0ANNBNA0**	1150 (1030)	1265 (1545)	1620 (1620)	630	560	**20CC1K1A0ANNBNA0**	13
1300 (1150)	1430 (1725)	2079 (2079)	1200	1000	**20CD1K3A0ANNBNA0**	1300 (1150)	1430 (1725)	2079 (2079)	710	630	**20CC1K3A0ANNBNA0**	13
1450 (1200)	1595 (1800)	2175 (2400)	1250	1000	**20CD1K4A0ANNBNA0**	1450 (1200)	1595 (1800)	2175 (2400)	800	710	**20CC1K4A0ANNBNA0**	13
1770 (1600)	1947 (2400)	2655 (2880)	1500	1400	**20CD1K7A0ANNENA0**	1770 (1600)	1947 (2400)	2655 (2880)	1000	900	**20CC1K7A0ANNENA0**	14
2150 (1940)	2365 (2910)	3225 (3492)	1900	1700	**20CD2K1A0ANNENA0**	2150 (1940)	2365 (2910)	3225 (3492)	1200	1100	**20CC2K1A0ANNENA0**	14

★ These drives have dual current ratings; normal duty applications and heavy duty applications (in parenthesis). The drive may be operated at either rating.
‡ The 2 sec. output current is only available at initial start or drive operating at light load.
♣ Frames 10 & up include a Rittal enclosure.

IP21, NEMA Type 1 (continued)

600…690V AC, Three-Phase Drives with 24V DC I/O

600V AC Input						690V AC Input						Frame Size
Output Amps ★			Normal Duty Hp	Heavy Duty Hp	Cat. No. ♣	Output Amps ★			Normal Duty kW	Heavy Duty kW	Cat. No. ♣	
Cont.	1 Min.	2 Sec. ‡				Cont.	1 Min.	2 Sec. ‡				
170 (144)	187 (216)	245 (245)	150	150	**20CE170A0ANNBNA0**	170 (144)	187 (216)	245 (245)	160	132	**20CF170A0ANNBNA0**	9
208 (170)	230 (250)	289 (289)	200	150	**20CE208A0ANNBNA0**	208 (170)	230 (250)	289 (289)	200	160	**20CF208A0ANNBNA0**	9
261 (208)	287 (312)	375 (375)	250	200	**20CE261A0ANNBNA0**	261 (208)	287 (312)	375 (375)	250	200	**20CF261A0ANNBNA0**	10
325 (261)	358 (392)	470 (470)	350	250	**20CE325A0ANNBNA0**	325 (261)	358 (392)	470 (470)	315	250	**20CF325A0ANNBNA0**	10
385 (325)	424 (488)	585 (585)	400	350	**20CE385A0ANNBNA0**	385 (325)	424 (488)	585 (585)	355	315	**20CF385A0ANNBNA0**	10
416 (325)	458 (488)	585 (585)	450	350	**20CE416A0ANNBNA0**	416 (325)	458 (488)	585 (585)	400	315	**20CF416A0ANNBNA0**	10
460 (385)	506 (578)	693 (693)	500	400	**20CE460A0ANNBNA0**	460 (385)	506 (578)	693 (693)	450	355	**20CF460A0ANNBNA0**	11
502 (460)	552 (690)	828 (828)	500	500	**20CE502A0ANNBNA0**	502 (460)	552 (690)	828 (828)	500	450	**20CF502A0ANNBNA0**	11
590 (502)	649 (753)	885 (904)	600	500	**20CE590A0ANNBNA0**	590 (502)	649 (753)	885 (904)	560	500	**20CF590A0ANNBNA0**	11
650 (590)	715 (885)	1062 (1062)	700	650	**20CE650A0ANNBNA0**	650 (590)	715 (885)	1062 (1062)	630	560	**20CF650A0ANNBNA0**	12
750 (650)	825 (975)	1170 (1170)	800	700	**20CE750A0ANNBNA0**	750 (650)	825 (975)	1170 (1170)	710	630	**20CF750A0ANNBNA0**	12
820 (750)	902 (975)	1170 (1170)	900	700	**20CE820A0ANNBNA0**	820 (750)	902 (975)	1170 (1170)	800	630	**20CF820A0ANNBNA0**	12
920 (820)	1012 (1230)	1380 (1410)	1000	900	**20CE920A0ANNBNA0**	920 (820)	1012 (1230)	1380 (1410)	900	800	**20CF920A0ANNBNA0**	13
1030 (920)	1133 (1380)	1545 (1755)	1100	1000	**20CE1K0A0ANNBNA0**	1030 (920)	1133 (1380)	1545 (1755)	1000	900	**20CF1K0A0ANNBNA0**	13
1180 (1030)	1298 (1463)	1755 (1755)	1300	1100	**20CE1K1A0ANNBNA0**	1180 (1030)	1298 (1463)	1755 (1755)	1100	1000	**20CF1K1A0ANNBNA0**	13
1500 (1300)	1650 (1950)	2250 (2340)	1600	1400	**20CE1K5A0ANNENA0**	1500 (1300)	1650 (1950)	2250 (2340)	1500	1300	**20CF1K5A0ANNENA0**	14
1900 (1500)	2090 (2250)	2700 (2700)	2000	1600	**20CE1K9A0ANNENA0**	1900 (1500)	2090 (2250)	2700 (2700)	1900	1500	**20CF1K9A0ANNENA0**	14
2250 (1900)	2475 (2782)	3335 (3335)	2400	2000	**20CE2K2A0ANNENA0**	2250 (1900)	2475 (2782)	3335 (3335)	2300	1900	**20CF2K2A0ANNENA0**	14

★ These drives have dual current ratings; normal duty applications and heavy duty applications (in parenthesis). The drive may be operated at either rating.

‡ The 2 sec. output current is only available at initial start or drive operating at light load.

♣ Frames 10 & up include a Rittal enclosure.

IP20, NEMA Type 1, MCC

380…480V AC, Three-Phase Drives with 24V DC I/O

480V AC Input						400V AC Input						
Output Amps ★			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps ★			Normal Duty kW	Heavy Duty kW	Cat. No.	Frame Size
Cont.	1 Min.	2 Sec. ‡				Cont.	1 Min.	2 Sec. ‡				
385 (300)	424 (450)	600 (600)	300	250	**20CD385B0ANNBNA0**	385 (300)	424 (450)	600 (600)	200	160	**20CD385B0ANNBNA0**	10
460 (385)	506 (578)	770 (770)	350	300	**20CD460B0ANNBNA0**	460 (385)	506 (578)	770 (770)	250	200	**20CD460B0ANNBNA0**	10
500 (420)	550 (630)	750 (840)	450	350	**20CD500B0ANNBNA0**	500 (420)	550 (630)	750 (840)	250	250	**20CD500B0ANNBNA0**	10
590 (520)	649 (780)	956 (956)	500	450	**20CD590B0ANNBNA0**	590 (520)	649 (780)	956 (956)	315	250	**20CD590B0ANNBNA0**	11
650 (590)	715 (885)	1062 (1062)	500	500	**20CD650B0ANNBNA0**	650 (590)	715 (885)	1062 (1062)	355	315	**20CD650B0ANNBNA0**	11
730 (650)	803 (975)	1095 (1170)	600	500	**20CD730B0ANNBNA0**	730 (650)	803 (975)	1095 (1170)	400	355	**20CD730B0ANNBNA0**	11
820 (730)	902 (1095)	1230 (1314)	700	600	**20CD820B0ANNBNA0**	820 (730)	902 (1095)	1230 (1314)	450	400	**20CD820B0ANNBNA0**	12
920 (820)	1012 (1230)	1380 (1476)	800	700	**20CD920B0ANNBNA0**	920 (820)	1012 (1230)	1380 (1476)	500	450	**20CD920B0ANNBNA0**	12
1030 (920)	1133 (1370)	1555 (1600)	900	800	**20CD1K0B0ANNBNA0**	1030 (920)	1133 (1370)	1555 (1600)	560	500	**20CD1K0B0ANNBNA0**	12

★ These drives have dual current ratings; normal duty applications and heavy duty applications (in parenthesis). The drive may be operated at either rating.
‡ The 2 sec. output current is only available at initial start or drive operating at light load.

600V AC, Three-Phase Drives with 24V DC I/O

600V AC Input						
Output Amps ★			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Frame Size
Cont.	1 Min.	2 Sec. ‡				
261 (208)	287 (312)	375 (375)	250	200	**20CE261B0ANNBNA0**	10
325 (261)	358 (392)	470 (470)	350	250	**20CE325B0ANNBNA0**	10
385 (325)	424 (488)	585 (585)	400	350	**20CE385B0ANNBNA0**	10
416 (325)	458 (488)	585 (585)	450	350	**20CE416B0ANNBNA0**	10
460 (385)	506 (578)	693 (693)	500	400	**20CE460B0ANNBNA0**	11
502 (460)	552 (690)	828 (828)	500	500	**20CE502B0ANNBNA0**	11
590 (502)	649 (753)	885 (904)	600	500	**20CE590B0ANNBNA0**	11
650 (590)	715 (885)	1062 (1062)	700	650	**20CE650B0ANNBNA0**	12
750 (650)	825 (975)	1170 (1170)	800	700	**20CE750B0ANNBNA0**	12
820 (750)	902 (975)	1170 (1170)	900	700	**20CE820B0ANNBNA0**	12

★ These drives have dual current ratings; normal duty applications and heavy duty applications (in parenthesis). The drive may be operated at either rating.
‡ The 2 sec. output current is only available at initial start or drive operating at light load.

IP54, NEMA Type 12, Rittal

380…480V AC, Three-Phase Drives with 24V DC I/O

480V AC Input						400V AC Input						
Output Amps ★			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps ★			Normal Duty kW	Heavy Duty kW	Cat. No.	Frame Size
Cont.	1 Min.	2 Sec. ‡				Cont.	1 Min.	2 Sec. ‡				
385 (300)	424 (450)	600 (600)	300	250	**20CD385H0ANNBNA0**	385 (300)	424 (450)	600 (600)	200	160	**20CC385H0ANNBNA0**	10
460 (385)	506 (578)	770 (770)	350	300	**20CD460H0ANNBNA0**	460 (385)	506 (578)	770 (770)	250	200	**20CC460H0ANNBNA0**	10
500 (420)	550 (630)	750 (840)	450	350	**20CD500H0ANNBNA0**	500 (420)	550 (630)	750 (840)	250	250	**20CC500H0ANNBNA0**	10
590 (520)	649 (780)	956 (956)	500	450	**20CD590H0ANNBNA0**	590 (520)	649 (780)	956 (956)	315	250	**20CC590H0ANNBNA0**	11
650 (590)	715 (885)	1062 (1062)	500	500	**20CD650H0ANNBNA0**	650 (590)	715 (885)	1062 (1062)	355	315	**20CC650H0ANNBNA0**	11
730 (650)	803 (975)	1095 (1170)	600	500	**20CD730H0ANNBNA0**	730 (650)	803 (975)	1095 (1170)	400	355	**20CC730H0ANNBNA0**	11
820 (730)	902 (1095)	1230 (1314)	700	600	**20CD820H0ANNBNA0**	820 (730)	902 (1095)	1230 (1314)	450	400	**20CC820H0ANNBNA0**	12
920 (820)	1012 (1230)	1380 (1476)	800	700	**20CD920H0ANNBNA0**	920 (820)	1012 (1230)	1380 (1476)	500	450	**20CC920H0ANNBNA0**	12
1030 (920)	1133 (1370)	1555 (1600)	900	800	**20CD1K0H0ANNBNA0**	1030 (920)	1133 (1370)	1555 (1600)	560	500	**20CC1K0H0ANNBNA0**	12
1150 (1030)	1265 (1545)	1620 (1620)	1000	900	**20CD1K1H0ANNBNA0**	1150 (1030)	1265 (1545)	1620 (1620)	630	560	**20CC1K1H0ANNBNA0**	13
1300 (1150)	1430 (1725)	2079 (2079)	1200	1000	**20CD1K3H0ANNBNA0**	1300 (1150)	1430 (1725)	2079 (2079)	710	630	**20CC1K3H0ANNBNA0**	13
1450 (1200)	1595 (1800)	2175 (2400)	1250	1000	**20CD1K4H0ANNBNA0**	1450 (1200)	1595 (1800)	2175 (2400)	800	710	**20CC1K4H0ANNBNA0**	13
1770 (1600)	1947 (2400)	2655 (2880)	1500	1400	**20CD1K7H0ANNENA0**	1770 (1600)	1947 (2400)	2655 (2880)	1000	900	**20CC1K7H0ANNENA0**	14
2150 (1940)	2365 (2910)	3225 (3492)	1900	1700	**20CD2K1H0ANNENA0**	2150 (1940)	2365 (2910)	3225 (3492)	1200	1100	**20CC2K1H0ANNENA0**	14

★ These drives have dual current ratings; normal duty applications and heavy duty applications (in parenthesis). The drive may be operated at either rating.
‡ The 2 sec. output current is only available at initial start or drive operating at light load.

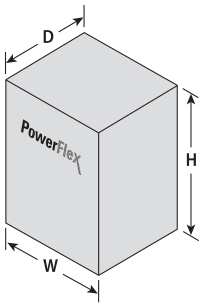
600…690V AC, Three-Phase Drives with 24V DC I/O

600V AC Input						690V AC Input						
Output Amps ★			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps ★			Normal Duty kW	Heavy Duty kW	Cat. No.	Frame Size
Cont.	1 Min.	2 Sec. ‡				Cont.	1 Min.	2 Sec. ‡				
261 (208)	287 (312)	375 (375)	250	200	**20CE261H0ANNBNA0**	261 (208)	287 (312)	375 (375)	250	200	**20CF261H0ANNBNA0**	10
325 (261)	358 (392)	470 (470)	350	250	**20CE325H0ANNBNA0**	325 (261)	358 (392)	470 (470)	315	250	**20CF325H0ANNBNA0**	10
385 (325)	424 (488)	585 (585)	400	350	**20CE385H0ANNBNA0**	385 (325)	424 (488)	585 (585)	355	315	**20CF385H0ANNBNA0**	10
416 (325)	458 (488)	585 (585)	450	350	**20CE416H0ANNBNA0**	416 (325)	458 (488)	585 (585)	400	315	**20CF416H0ANNBNA0**	10
460 (385)	506 (578)	693 (693)	500	400	**20CE460H0ANNBNA0**	460 (385)	506 (578)	693 (693)	450	355	**20CF460H0ANNBNA0**	11
502 (460)	552 (690)	828 (828)	500	500	**20CE502H0ANNBNA0**	502 (460)	552 (690)	828 (828)	500	450	**20CF502H0ANNBNA0**	11
590 (502)	649 (753)	885 (904)	600	500	**20CE590H0ANNBNA0**	590 (502)	649 (753)	885 (904)	560	500	**20CF590H0ANNBNA0**	11
650 (590)	715 (885)	1062 (1062)	700	650	**20CE650H0ANNBNA0**	650 (590)	715 (885)	1062 (1062)	630	560	**20CF650H0ANNBNA0**	12
750 (650)	825 (975)	1170 (1170)	800	700	**20CE750H0ANNBNA0**	750 (650)	825 (975)	1170 (1170)	710	630	**20CF750H0ANNBNA0**	12
820 (750)	902 (975)	1170 (1170)	900	700	**20CE820H0ANNBNA0**	820 (750)	902 (975)	1170 (1170)	800	630	**20CF820H0ANNBNA0**	12
920 (820)	1012 (1230)	1380 (1410)	1000	900	**20CE920H0ANNBNA0**	920 (820)	1012 (1230)	1380 (1410)	900	800	**20CF920H0ANNBNA0**	13
1030 (920)	1133 (1380)	1545 (1755)	1100	1000	**20CE1K0H0ANNBNA0**	1030 (920)	1133 (1380)	1545 (1755)	1000	900	**20CF1K0H0ANNBNA0**	13
1180 (1030)	1298 (1463)	1755 (1755)	1300	1100	**20CE1K1H0ANNBNA0**	1180 (1030)	1298 (1463)	1755 (1755)	1100	1000	**20CF1K1H0ANNBNA0**	13
1500 (1300)	1650 (1950)	2250 (2340)	1600	1400	**20CE1K5H0ANNENA0**	1500 (1300)	1650 (1950)	2250 (2340)	1500	1300	**20CF1K5H0ANNENA0**	14
1900 (1500)	2090 (2250)	2700 (2700)	2000	1600	**20CE1K9H0ANNENA0**	1900 (1500)	2090 (2250)	2700 (2700)	1900	1500	**20CF1K9H0ANNENA0**	14
2250 (1900)	2475 (2782)	3335 (3335)	2400	2000	**20CE2K2H0ANNENA0**	2250 (1900)	2475 (2782)	3335 (3335)	2300	1900	**20CF2K2H0ANNENA0**	14

★ These drives have dual current ratings; normal duty applications and heavy duty applications (in parenthesis). The drive may be operated at either rating.
‡ The 2 sec. output current is only available at initial start or drive operating at light load.

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP21, NEMA Type 1

Frame	H	W	D	Weight ‡
9	1150.0 (45.28)	480.0 (18.90)	363.3 (14.32)	151.00 (333.0)
10	2275.0 (89.57)	597.0 (23.50)	632.5 (24.90)	432.00 (952.0)
11	2275.0 (89.57)	797.0 (31.38)	621.7 (24.48)	676.00 (1490.0)
12	2275.0 (89.57)	1196.0 (47.09)	632.5 (24.90)	864.00 (1906.0)
13	2275.0 (89.57)	1412.0 (55.59) ★	620.0 (24.41)	1400.00 (3086.0)
14 (1500A)	2275.0 (89.57)	2397.0 (94.37)	620.0 (24.41)	1920.00 (4233.0)
14 (above 1500A)	2275.0 (89.57)	2800.0 (110.24)	620.0 (24.41)	3840.00 (8466.0)
14 (DC Input)	2270.0 (89.37)	1597.0 (62.87)	620.0 (24.41)	1450.00 (3130.0)

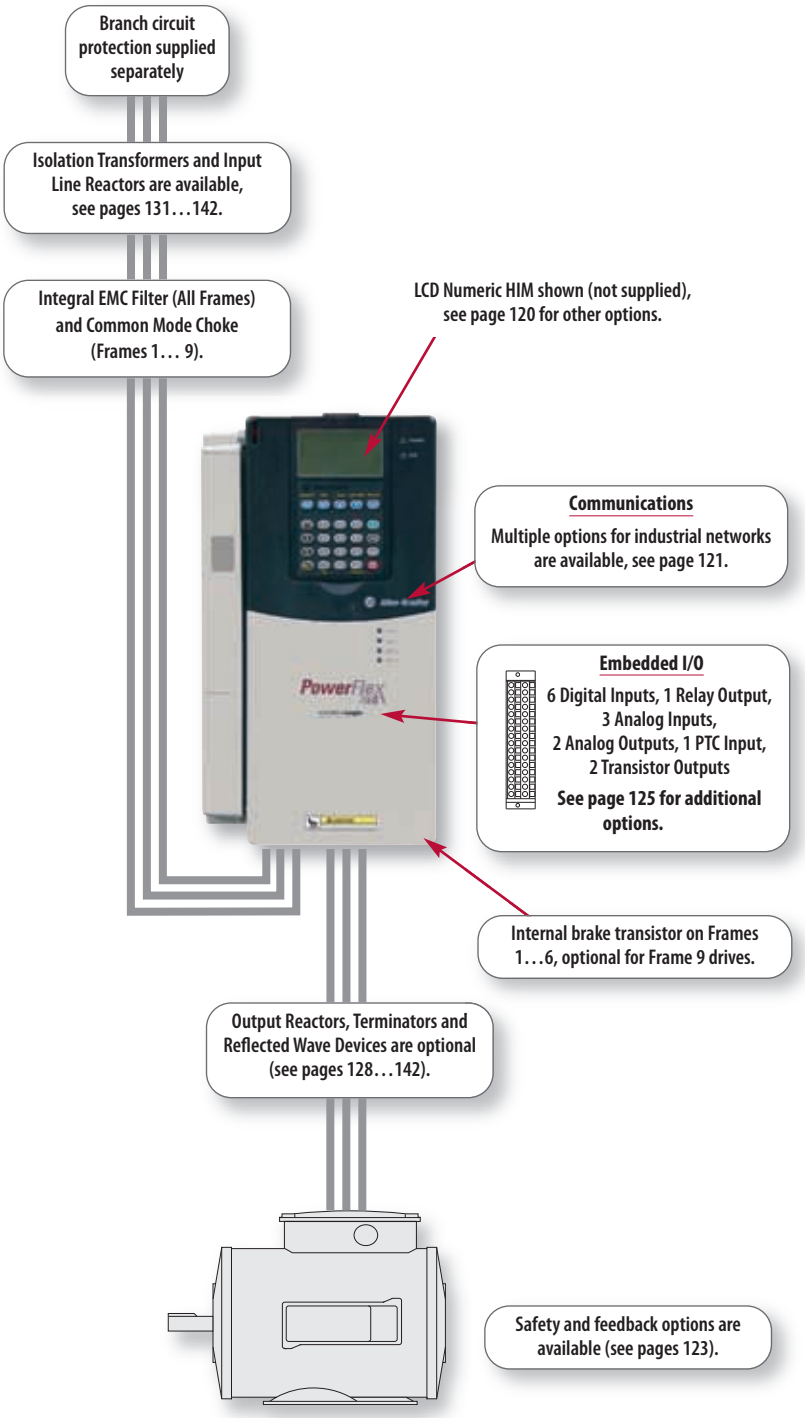
★ Width for 400/480V AC (540/650V DC) 1300 and 1450A is 1600.0 (62.99).
‡ Weights are approximate. Refer to the PowerFlex 700H Technical Data for detailed weight information.

PowerFlex 700S AC Drive

The PowerFlex 700S offers optimized integration for the most demanding stand-alone and coordinated drive control and drive system applications. The PowerFlex 700S offers a DriveLogix option which combines the powerful performance and flexible control of PowerFlex AC drives with a high-performance Logix engine to produce a highly functional, cost-effective drive and control solution.

PowerFlex 700S at a glance

Ratings	
200…240V:	0.75…66 kW / 1…100 Hp / 4.2…260 A
380…480V:	0.75…800 kW / 1…1250 Hp / 2.1…1450 A
500…600V:	1…1600 Hp / 1.7…1500 A
690V:	50…1500 kW / 52…1500 A
Motor Control	• V/Hz Control • Vector Control with FORCE Technology (with and without encoder) • Permanent Magnet Motor Control
Enclosures	• IP20, NEMA/UL Type 1 • IP21, NEMA/UL Type 1
Safety	DriveGuard Safe Torque-Off / EN 954-1 Cat. 3
Additional Features	• Integrated position loop for simple indexing to electronic line shaft applications • SynchLink for high speed data transfer and synchronization • Multiple motor feedback options • DriveLogix
Certifications	• C-Tick • c-UL, UL • CE • IEC (Designed to Meet) • RINA (Frames 1…10) • TÜV FS ISO/EN13849-1 (EN954-1) with Safe Torque-Off option
Options	See pages 120…142


Branch circuit protection supplied separately
Isolation Transformers and Input Line Reactors are available, see pages 131…142.
Integral EMC Filter (All Frames) and Common Mode Choke (Frames 1… 9).
LCD Numeric HIM shown (not supplied), see page 120 for other options.
Communications
Multiple options for industrial networks are available, see page 121.
Embedded I/O
6 Digital Inputs, 1 Relay Output, 3 Analog Inputs, 2 Analog Outputs, 1 PTC Input, 2 Transistor Outputs
See page 125 for additional options.
Internal brake transistor on Frames 1…6, optional for Frame 9 drives.
Output Reactors, Terminators and Reflected Wave Devices are optional (see pages 128…142).
Safety and feedback options are available (see pages 123).

Additional Information

PowerFlex 700S Technical Data, publication 20D-TD002
PowerFlex 700S Installation Manual Frames 1…6, publication 20D-IN024
PowerFlex 700S Installation Manual Frames 9…14, publication PFLEX-IN006
PowerFlex 700S Programming Manual, publication 20D-PM001

Catalog Number Explanation

20D	D	2P1	A	0	E	Y	N	A	N	A	N	E
	Voltage Rating	Rating	Enclosure			Brake IGBT	Brake Resistor			Control Options		Additional Configurations

Product Selection

IP20, NEMA/UL Type 1

200…240V AC, Three-Phase Drives

240V AC Input						208V AC Input ★						Frame Size
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
4.2	4.8	6.4	1	0.75	**20DB4P2A0EYNANANE**	4.8	5.6	7	0.75	0.37	**20DB4P2A0EYNANANE**	1
6.8	9	12	2	1.5	**20DB6P8A0EYNANANE**	7.8	10.4	13.8	1.5	0.75	**20DB6P8A0EYNANANE**	1
9.6	10.6	14.4	3	2	**20DB9P6A0EYNANANE**	11	12.1	17	2.2	1.5	**20DB9P6A0EYNANANE**	1
15.3	16.8	23	5	3	**20DB015A0EYNANANE**	17.5	19.3	26.3	4	2.2	**20DB015A0EYNANANE**	1
22	24.2	33	7.5	5	**20DB022A0EYNANANE**	25.3	27.8	38	5.5	4	**20DB022A0EYNANANE**	1
28	33	44	10	7.5	**20DB028A0EYNANANE**	32.2	38	50.6	7.5	5.5	**20DB028A0EYNANANE**	2
42	46.2	63	15	10	**20DB042A0EYNANANE**	48.3	53.1	72.5	11	7.5	**20DB042A0EYNANANE**	3
52	63	80	20	15	**20DB052A0EYNANANE**	56	64	86	15	11	**20DB052A0EYNANANE**	3
70	78	105	25	20	**20DB070A0ENNANANE**	78.2	86	117.3	18.5	15	**20DB070A0ENNANANE**	4 ♣
80	105	136	30	25	**20DB080A0ENNANANE**	92	117.3	156.4	22	18.5	**20DB080A0ENNANANE**	4 ♣
104 (80) ‡	115 (120)	175 (160)	40	30	**20DB104A0ENNANANE**	120 (92)	132 (138)	175 (175)	30	22	**20DB104A0ENNANANE**	5 ♣
130 (104) ‡	143 (156)	175 (175)	50	40	**20DB130A0ENNANANE**	130 (104)	143 (156)	175 (175)	30	30	**20DB130A0ENNANANE**	5 ♣
154 (130) ‡	169 (195)	231 (260)	60	50	**20DB154A0ENNANANE**	177 (150)	195 (225)	266 (300)	45	37	**20DB154A0ENNANANE**	6 ♣
192 (154) ‡	211 (231)	288 (308)	75	60	**20DB192A0ENNANANE**	221 (177)	243 (266)	308 (308)	55	45	**20DB192A0ENNANANE**	6 ♣
260 (205) ‡	286 (305)	390 (410)	100	75	**20DB260A0ENNANANE**	260 (205)	286 (305)	390 (410)	66	55	**20DB260A0ENNANANE**	6 ♣

★ Drive must be programmed to lower voltage to obtain higher currents shown.
‡ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
♣ Also available with internal Brake IGBT (20DxxxxA0E **Y** NANANE).

IP20, NEMA/UL Type 1 (continued)

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
2.1	2.4	3.2	1	0.75	**20DD2P1A0EYNANANE**	2.1	2.4	3.2	0.75	0.55	**20DC2P1A0EYNANANE**	1
3.4	4.5	6	2	1.5	**20DD3P4A0EYNANANE**	3.5	4.5	6	1.5	0.75	**20DC3P5A0EYNANANE**	1
5	5.5	7.5	3	2	**20DD5P0A0EYNANANE**	5	5.5	7.5	2.2	1.5	**20DC5P0A0EYNANANE**	1
8	8.8	12	5	3	**20DD8P0A0EYNANANE**	8.7	9.9	13.2	4	2.2	**20DC8P7A0EYNANANE**	1
11	12.1	16.5	7.5	5	**20DD011A0EYNANANE**	11.5	13	17.4	5.5	4	**20DC011A0EYNANANE**	1
14	16.5	22	10	7.5	**20DD014A0EYNANANE**	15.4	17.2	23.1	7.5	5.5	**20DC015A0EYNANANE**	1
22	24.2	33	15	10	**20DD022A0EYNANANE**	22	24.2	33	11	7.5	**20DC022A0EYNANANE**	1
27	33	44	20	15	**20DD027A0EYNANANE**	30	33	45	15	11	**20DC030A0EYNANANE**	2
34	40.5	54	25	20	**20DD034A0EYNANANE**	37	45	60	18.5	15	**20DC037A0EYNANANE**	2
40	51	68	30	25	**20DD040A0EYNANANE**	43	56	74	22	18.5	**20DC043A0EYNANANE**	3
52	60	80	40	30	**20DD052A0EYNANANE**	56	64	86	30	22	**20DC056A0EYNANANE**	3
65	78	104	50	40	**20DD065A0EYNANANE**	72	84	112	37	30	**20DC072A0EYNANANE**	3
77 (65) ‡	85 (98)	116 (130)	60	50	**20DD077A0ENNANANE**	85 (72)	94 (108)	128 (144)	45	37	**20DC085A0ENNANANE**	4 ♣
96 (77) ‡	106 (116)	144 (154)	75	60	**20DD096A0ENNANANE**	105 (85)	116 (128)	158 (170)	55	45	**20DC105A0ENNANANE**	5 ♣
125 (96) ‡	138 (144)	163 (168)	100	75	**20DD125A0ENNANANE**	125 (96)	138 (144)	163 (168)	55	45	**20DC125A0ENNANANE**	5 ♣
–	–	–	–	–	**–**	140 (105)	154 (158)	210 (210)	75	55	**20DC140A0ENNANANE**	5 ♣
156 (125) ‡	172 (188)	233 (250)	125	100	**20DD156A0ENNANANE**	170 (140)	187 (210)	255 (280)	90	75	**20DC170A0ENNANANE**	6 ♣
180 (156) ‡	198 (234)	270 (312)	150	125	**20DD180A0ENNANANE**	205 (170)	220 (255)	289 (313)	110	90	**20DC205A0ENNANANE**	6 ♣
248 (180) ‡	273 (270)	372 (360)	200	150	**20DD248A0ENNANANE**	260 (205)	286 (308)	390 (410)	132	110	**20DC260A0ENNANANE**	6 ♣
261 (205) ‡	287 (308)	410 (410)	200	150	**20DD261A0ENNBNANE**	261 (205)	287 (308)	410 (410)	132	110	**20DC261A0ENNBNANE**	9
300 (245) ‡	330 (368)	450 (490)	250	200	**20DD300A0ENNBNANE**	300 (245)	330 (368)	450 (490)	160	130	**20DC300A0ENNBNANE**	9
385 (300) ‡	424 (450)	600 (600)	300	250	**20DD385A0ENNBNANE**	385 (300)	424 (450)	600 (600)	200	160	**20DC385A0ENNBNANE**	10
460 (385) ‡	506 (578)	770 (770)	350	300	**20DD460A0ENNBNANE**	460 (385)	506 (578)	770 (770)	250	200	**20DC460A0ENNBNANE**	10
500 (420) ‡	550 (630)	750 (840)	450	350	**20DD500A0ENNBNANE**	500 (420)	550 (630)	750 (840)	250	250	**20DC500A0ENNBNANE**	10
590 (520) ‡	649 (780)	956 (956)	500	450	**20DD590A0ENNBNANE**	590 (520)	649 (780)	956 (956)	315	250	**20DC590A0ENNBNANE**	11
650 (590) ‡	715 (885)	1062 (1062)	500	500	**20DD650A0ENNBNANE**	650 (590)	715 (885)	1062 (1062)	355	315	**20DC650A0ENNBNANE**	11
730 (650) ‡	803 (975)	1095 (1170)	600	500	**20DD730A0ENNBNANE**	730 (650)	803 (975)	1095 (1170)	400	355	**20DC730A0ENNBNANE**	11
820 (730) ‡	902 (1095)	1230 (1314)	700	600	**20DD820A0ENNBNANE**	820 (730)	902 (1095)	1230 (1314)	450	400	**20DC820A0ENNBNANE**	12
920 (820) ‡	1012 (1230)	1380 (1476)	800	700	**20DD920A0ENNBNANE**	920 (820)	1012 (1230)	1380 (1476)	500	450	**20DC920A0ENNBNANE**	12
1030 (920) ‡	1133 (1370)	1555 (1600)	900	800	**20DD1K0A0ENNBNANE**	1030 (920)	1133 (1370)	1555 (1600)	560	500	**20DC1K0A0ENNBNANE**	12
1150 (1030) ‡	1265 (1545)	1620 (1620)	1000	900	**20DD1K1A0ENNBNANE**	1150 (1030)	1265 (1545)	1620 (1620)	630	560	**20DC1K1A0ENNBNANE**	13
1300 (1150) ‡	1430 (1725)	2079 (2079)	1200	1000	**20DD1K3A0ENNBNANE**	1300 (1150)	1430 (1725)	2079 (2079)	710	630	**20DC1K3A0ENNBNANE**	13
1450 (1200) ‡	1595 (1800)	2175 (2400)	1250	1000	**20DD1K4A0ENNBNANE**	1450 (1200)	1595 (1800)	2175 (2400)	800	710	**20DC1K4A0ENNBNANE**	13

‡ These drives have dual current ratings; one for normal duty applications, and one for heavy duty (in parenthesis). The drive may be operated at either rating.

♣ Also available with internal Brake IGBT (20DxxxxA0E **Y** NANANE).

500…690V AC, Three-Phase Drives

500…600V AC Input Δ						690V AC Input Δ						
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
1.7	2	2.6	1	0.5	**20DE1P7A0EYNANANE**	–	–	–	–	–	**–**	1
2.7	3.6	4.8	2	1	**20DE2P7A0EYNANANE**	–	–	–	–	–	**–**	1
3.9	4.3	5.9	3	2	**20DE3P9A0EYNANANE**	–	–	–	–	–	**–**	1
6.1	6.7	9.2	5	3	**20DE6P1A0EYNANANE**	–	–	–	–	–	**–**	1
9	9.9	13.5	7.5	5	**20DE9P0A0EYNANANE**	–	–	–	–	–	**–**	1
11	13.5	18	10	7.5	**20DE011A0EYNANANE**	–	–	–	–	–	**–**	1
17	18.7	25.5	15	10	**20DE017A0EYNANANE**	–	–	–	–	–	**–**	1
22	25.5	34	20	15	**20DE022A0EYNANANE**	–	–	–	–	–	**–**	2
27	33	44	25	20	**20DE027A0EYNANANE**	–	–	–	–	–	**–**	2
32	40.5	54	30	25	**20DE032A0EYNANANE**	–	–	–	–	–	**–**	3
41	48	64	40	30	**20DE041A0EYNANANE**	–	–	–	–	–	**–**	3
52	61.5	82	50	40	**20DE052A0EYNANANE**	52	57	78	50	40	**20DF052A0ENNANANE**	3 ♦
62	78	104	60	50	**20DE062A0EYNANANE**	60	66	90	55	45	**20DF060A0ENNANANE**	4 ♦ ♣
77 (63) ‡	85 (94)	116 (126)	75	60	**20DE077A0ENNANANE**	82 (60)	90 (90)	120 (123)	75	55	**20DF082A0ENNANANE**	5 ♣
99 (77) ‡	109 (116)	126 (138)	100	75	**20DE099A0ENNANANE**	98 (82)	108 (123)	127 (140)	90	75	**20DF098A0ENNANANE**	5 ♣
125 (99) ‡	138 (149)	188 (198)	125	100	**20DE125A0ENNANANE**	119 (98)	131 (147)	179 (196)	110	90	**20DF119A0ENNANANE**	6 ♣
144 (125) ‡	158 (188)	216 (250)	150	125	**20DE144A0ENNANANE**	142 (119)	156 (179)	213 (238)	132	110	**20DF142A0ENNANANE**	6 ♣
170 (144) ‡	187 (216)	245 (245)	150	150	**20DE170A0ENNBNANE**	170 (144)	187 (216)	245 (245)	160	132	**20DF170A0ENNBNANE**	9
208 (170) ‡	230 (250)	289 (289)	200	150	**20DE208A0ENNBNANE**	208 (170)	230 (250)	289 (289)	200	160	**20DF208A0ENNBNANE**	9
261 (208) ‡	287 (312)	375 (375)	250	200	**20DE261A0ENNBNANE**	261 (208)	287 (312)	375 (375)	250	200	**20DF261A0ENNBNANE**	10
325 (261) ‡	358 (392)	470 (470)	350	250	**20DE325A0ENNBNANE**	325 (261)	358 (392)	470 (470)	315	250	**20DF325A0ENNBNANE**	10
385 (325) ‡	424 (488)	585 (585)	400	350	**20DE385A0ENNBNANE**	385 (325)	424 (488)	585 (585)	355	315	**20DF385A0ENNBNANE**	10
416 (325) ‡	458 (488)	585 (585)	450	350	**20DE416A0ENNBNANE**	416 (325)	458 (488)	585 (585)	400	315	**20DF416A0ENNBNANE**	10
460 (385) ‡	506 (578)	693 (693)	450	400	**20DE460A0ENNBNANE**	460 (385)	506 (578)	693 (693)	450	355	**20DF460A0ENNBNANE**	11
502 (460) ‡	552 (690)	828 (828)	500	450	**20DE502A0ENNBNANE**	502 (460)	552 (690)	828 (828)	500	450	**20DF502A0ENNBNANE**	11
590 (502) ‡	649 (753)	904 (904)	600	500	**20DE590A0ENNBNANE**	590 (502)	649 (753)	904 (904)	560	500	**20DF590A0ENNBNANE**	11
650 (590) ‡	715 (885)	1062 (1062)	700	650	**20DE650A0ENNBNANE**	650 (590)	715 (885)	1062 (1062)	630	560	**20DF650A0ENNBNANE**	12
750 (650) ‡	825 (975)	1170 (1170)	800	700	**20DE750A0ENNBNANE**	750 (650)	825 (975)	1170 (1170)	710	630	**20DF750A0ENNBNANE**	12
820 (750) ‡§	902 (975)	1170 (1170)	900	700	**20DE820A0ENNBNANE**	820 (750)	902 (975)	1170 (1170)	800	630	**20DF820A0ENNBNANE**	12
920 (820) ‡	1012 (1230)	1380 (1410)	1000	900	**20DE920A0ENNBNANE**	920 (820)	1012 (1230)	1380 (1410)	900	800	**20DF920A0ENNBNANE**	13
1030 (920) ‡	1133 (1380)	1545 (1755)	1100	1000	**20DE1K0A0ENNBNANE**	1030 (920)	1133 (1380)	1545 (1755)	1000	900	**20DF1K0A0ENNBNANE**	13
1180 (1030) ‡	1298 (1463)	1755 (1755)	1300	1100	**20DE1K1A0ENNBNANE**	1180 (1030)	1298 (1463)	1755 (1755)	1100	1000	**20DF1K1A0ENNBNANE**	13
1500 (1300) ‡	1650 (1950)	2250 (2340)	1600	1400	**20DE1K5A0ENNBNANE**	1500 (1300)	1650 (1950)	2250 (2340)	1500	1300	**20DF1K5A0ENNBNANE**	14

‡ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

§ 600V class drives at 820 amps (ND) such as 20DF820 & 20DE820 are only capable of producing 95% of starting torque under 10 Hz.

♣ Also available with internal Brake IGBT (20DxxxxA0E **Y** NANANE).

Δ CE Certification testing has not been performed on 600V class drives Frames 1…4.

♦ 690V drives are Frame 5.

IP21, NEMA/UL Type 1, MCC

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						Frame Size
Output Amps ‡			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps ‡			Normal Duty kW	Heavy Duty kW	Cat. No.	
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
385 (300)	424 (450)	600 (600)	300	250	**20DD385B0ENNBNANE**	385 (300)	424 (450)	600 (600)	200	160	**20DC385B0ENNBNANE**	10
460 (385)	506 (578)	770 (770)	350	300	**20DD460B0ENNBNANE**	460 (385)	506 (578)	770 (770)	250	200	**20DC460B0ENNBNANE**	10
500 (420)	550 (630)	750 (840)	450	350	**20DD500B0ENNBNANE**	500 (420)	550 (630)	750 (840)	250	250	**20DC500B0ENNBNANE**	10
590 (520)	649 (780)	956 (956)	500	450	**20DD590B0ENNBNANE**	590 (520)	649 (780)	956 (956)	315	250	**20DC590B0ENNBNANE**	11
650 (590)	715 (885)	1062 (1062)	500	500	**20DD650B0ENNBNANE**	650 (590)	715 (885)	1062 (1062)	355	315	**20DC650B0ENNBNANE**	11
730 (650)	803 (975)	1095 (1170)	600	500	**20DD730B0ENNBNANE**	730 (650)	803 (975)	1095 (1170)	400	355	**20DC730B0ENNBNANE**	11
820 (730)	902 (1095)	1230 (1314)	700	600	**20DD820B0ENNBNANE**	820 (730)	902 (1095)	1230 (1314)	450	400	**20DC820B0ENNBNANE**	12
920 (820)	1012 (1230)	1380 (1476)	800	700	**20DD920B0ENNBNANE**	920 (820)	1012 (1230)	1380 (1476)	500	450	**20DC920B0ENNBNANE**	12
1030 (920)	1133 (1370)	1555 (1600)	900	800	**20DD1K0B0ENNBNANE**	1030 (920)	1133 (1370)	1555 (1600)	560	500	**20DC1K0B0ENNBNANE**	12

‡ These drives have dual current ratings; one for normal duty applications, and one for heavy duty (in parenthesis). The drive may be operated at either rating.

500…600V AC, Three-Phase Drives

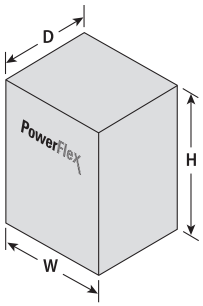
600V AC Input						Frame Size
Output Amps ‡			Normal Duty Hp	Heavy Duty Hp	Cat. No.	
Cont.	1 Min.	3 Sec.				
261 (208)	287 (312)	375 (375)	250	200	**20DE261B0ENNBNANE**	10
325 (261)	358 (392)	470 (470)	350	250	**20DE325B0ENNBNANE**	10
385 (325)	424 (488)	585 (585)	400	350	**20DE385B0ENNBNANE**	10
416 (325)	458 (488)	585 (585)	450	350	**20DE416B0ENNBNANE**	10
460 (385)	506 (578)	693 (693)	450	400	**20DE460B0ENNBNANE**	11
502 (460)	552 (690)	828 (828)	500	450	**20DE502B0ENNBNANE**	11
590 (502)	649 (753)	904 (904)	600	500	**20DE590B0ENNBNANE**	11
650 (590)	715 (885)	1062 (1062)	700	650	**20DE650B0ENNBNANE**	12
750 (650)	825 (975)	1170 (1170)	800	700	**20DE750B0ENNBNANE**	12
820 (750) §	902 (975)	1170 (1170)	900	700	**20DE820B0ENNBNANE**	12

‡ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

§ 600V class drives at 820 amps (ND) such as 20DF820 & 20DE820 are only capable of producing 95% of starting torque under 10 Hz.

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP20/21, NEMA/UL Type 1

Frame	H	W	D	Weight ★
1	336.0 (13.23)	166.9 (6.57) §	200.0 (7.87)	7.03 (15.5)
2	342.5 (13.48)	253.9 (9.99) §	200.0 (7.87)	12.52 (27.6)
3	517.5 (20.37)	253.9 (9.99) §	200.0 (7.87)	18.55 (40.9)
4	758.8 (29.87)	251.9 (9.92) §	201.7 (7.94)	24.49 (54.0)
5	644.5 (25.37) ‡	339.9 (13.38) §	275.4 (10.84)	37.19 (82.0)
6	850.0 (33.46)	435.8 (17.16) §	275.5 (10.85)	71.44 (157.5) Δ
9	1150.0 (45.28)	480.0 (18.90)	363.3 (14.32)	151.00 (333.0)
10	2275.0 (89.57)	597.0 (23.50)	632.5 (24.90)	432.00 (952.0)
11	2275.0 (89.57)	797.0 (31.38)	621.7 (24.48)	676.00 (1490.0)
12	2275.0 (89.57)	1196.1 (47.09)	632.5 (24.90)	864.00 (1906.0)
13	2275.0 (89.57)	1412.0 (55.6) ♣	620.0 (24.41)	1400 (3086)
14 (1500A)	2275.0 (89.57)	2397.0 (94.37)	620.0 (24.41)	1920.00 (4233.0)
14 (above 1500A)	2275.0 (89.57)	2800.0 (110.24)	620.0 (24.41)	1920.00 (4233.0)
14 (DC Input)	2270.0 (89.37)	1597.0 (62.87)	620.0 (24.41)	1220.00 (2690.0)

★ Weights are approximate and include HIM, DriveLogix controller with ControlNet daughtercard, Hi-Resolution Encoder Option, and 20-COMM-C ControlNet adapter. Refer to the PowerFlex 700S Technical Data for detailed weight information.

‡ When using the supplied junction box (100 Hp drives Only), add an additional 45.1 mm (1.78 in.) to this dimension.

§ Dimension includes Expanded Cassette.

♣ Width for 400/480V AC (540/650V DC) 1300 and 1450A is 1600.0 (62.99).

Δ Add an additional 3.6 kg (8.00 lbs.) for 200 Hp drives.

PowerFlex 700L AC Drive

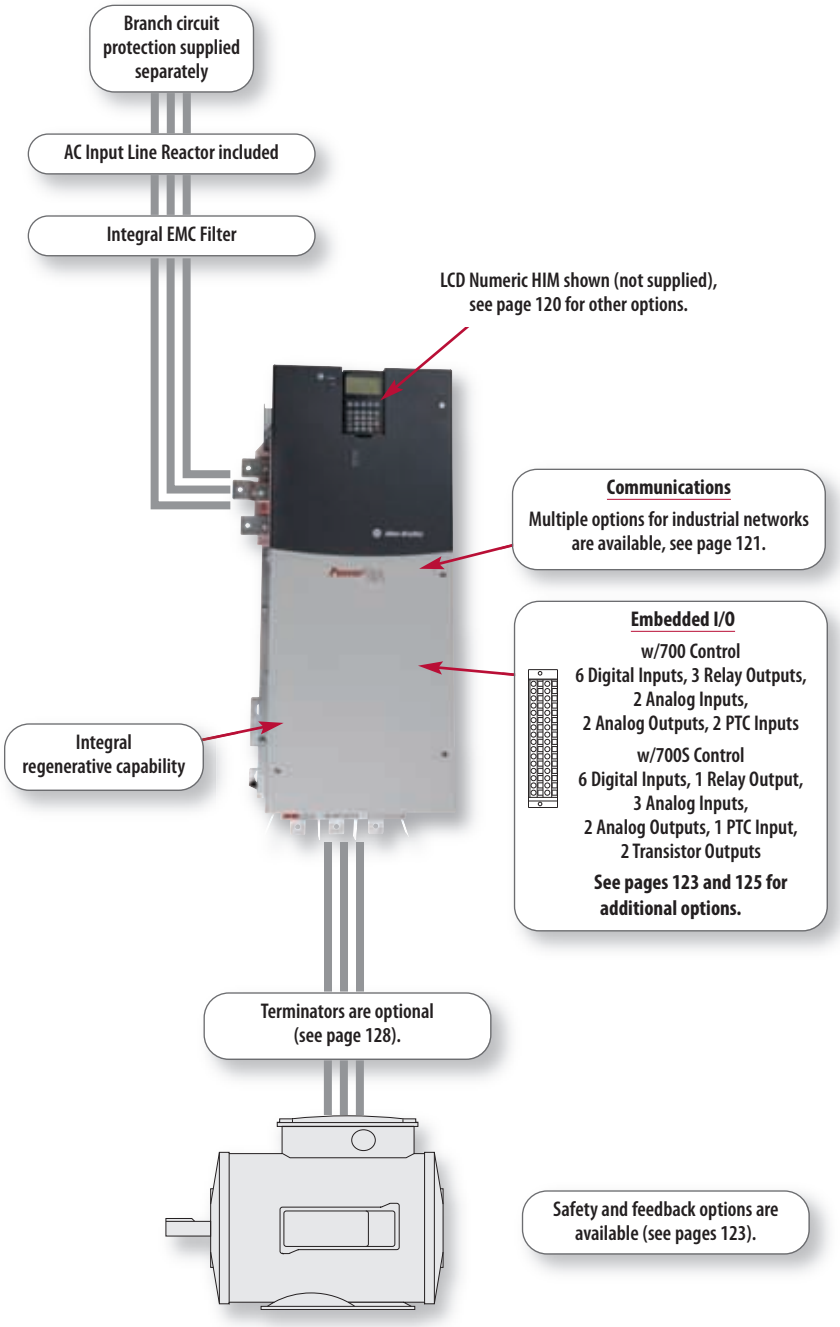
The PowerFlex 700L is available with the PowerFlex 700 or PowerFlex 700S control in a fully regenerative, liquid-cooled power structure. This powerful combination offers great performance and high power capabilities in a small package along with low harmonics.

Available as a panel mount unit or in a cabinet, this liquid cooled drive features regenerative braking which is ideal for precise, high-response speed and position control, continuous holdback, rapid deceleration and stopping of high inertia loads. Instead of wasting energy with resistor braking technology, regenerative braking actually puts the energy back into the system to be used by other equipment.

PowerFlex 700L at a glance

Ratings	
380…480V:	200…860 kW / 268…1150 Hp / 360…1250 A
500…600V:	345…650 kW / 465…870 Hp / 425…800 A
690V:	355…657 kW / 475…881 Hp / 380…705 A
Motor Control	Select PowerFlex 700 or PowerFlex 700S Control
Enclosures	• IP00, NEMA/UL Type Open (Frame 2) • IP20, NEMA/UL Type 1 (Frames 3A, 3B)
Safety	DriveGuard Safe Torque-Off / EN 954-1 Cat. 3 with PowerFlex 700S control. ★
Additional Features	SynchLink and DriveLogix functionality with PowerFlex 700S control. Refer to the PowerFlex 700 or 700S for further information.
Certifications	• c-UL, UL • CE • IEC (Designed to Meet) • TÜV FS ISO/EN13849-1 (EN954-1) with PowerFlex 700S control
Options	See pages 120…142

★ On Frame 2 drives, DriveGuard Safe Torque-Off is only available as a factory installed option.


Branch circuit protection supplied separately
AC Input Line Reactor included
Integral EMC Filter
LCD Numeric HIM shown (not supplied), see page 120 for other options.
Communications
Multiple options for industrial networks are available, see page 121.
Embedded I/O
w/700 Control
6 Digital Inputs, 3 Relay Outputs, 2 Analog Inputs, 2 Analog Outputs, 2 PTC Inputs
w/700S Control
6 Digital Inputs, 1 Relay Output, 3 Analog Inputs, 2 Analog Outputs, 1 PTC Input, 2 Transistor Outputs
See pages 123 and 125 for additional options.
Integral regenerative capability
Terminators are optional (see page 128).
Safety and feedback options are available (see pages 123).

Additional Information

PowerFlex 700L Technical Data, publication 20L-TD001
PowerFlex 700L User Manual, publication 20L-UM001

Catalog Number Explanation

20L	E	800	A	0	E	N	N	A	N	1	0	W	A
	Voltage Rating	Rating	Enclosure					Type		Control		Additional Configurations	

Product Selection

400V AC, Three-Phase Drives

Output Amps			Nominal Power Ratings				IP20, NEMA/UL Type 1 ★	
400V AC Input			Normal Duty		Heavy Duty			
Cont.	1 Min.	3 Sec.	kW	Hp	kW	Hp	Cat. No.	Frame Size
360	396	540	200	268	150	200	**20LC360N0ENNAN10WA**	2
650	715	975	370	500	270	365	**20LC650A0ENNAN10WA**	3A
1250	1375	1875	715	960	525	700	**20LC1K2A0ENNAN10WA**	3B

★ Frames 3A and 3B Only. Frame 2 drives are IP00, NEMA/UL Type Open.

480V AC, Three-Phase Drives

Output Amps			Nominal Power Ratings				IP20, NEMA/UL Type 1 ★	
480V AC Input			Normal Duty		Heavy Duty			
Cont.	1 Min.	3 Sec.	kW	Hp	kW	Hp	Cat. No.	Frame Size
360	396	540	224	300	175	235	**20LD360N0ENNAN10WA**	2
650	715	975	445	600	325	440	**20LD650A0ENNAN10WA**	3A
1250	1375	1875	860	1150	630	845	**20LD1K2A0ENNAN10WA**	3B

★ Frames 3A and 3B Only. Frame 2 drives are IP00, NEMA/UL Type Open.

600V AC, Three-Phase Drives

Output Amps			Nominal Power Ratings				IP20, NEMA/UL Type 1	
600V AC Input			Normal Duty		Heavy Duty			Frame Size
Cont.	1 Min.	3 Sec.	kW	Hp	kW	Hp	Cat. No.	
425	470	640	345	465	255	345	**20LE425A0ENNAN10WA**	3A
800	885	1200	650	870	480	640	**20LE800A0ENNAN10WA**	3B

690V AC, Three-Phase Drives

Output Amps			Nominal Power Ratings				IP20, NEMA/UL Type 1	
690V AC Input			Normal Duty		Heavy Duty			Frame Size
Cont.	1 Min.	3 Sec.	kW	Hp	kW	Hp	Cat. No.	
380	420	570	355	475	260	350	**20LF380A0ENNAN10WA**	3A
705	780	1060	657	881	485	650	**20LF705A0ENNAN10WA**	3B

Cooling Loops

Liquid to Liquid Heat Exchanger

The liquid to liquid heat exchanger utilizes a heat transfer plate to transfer heat from one liquid to another and requires a stable water supply. This type of cooling loop must be user supplied, it is not available from Rockwell Automation.

Liquid to Air Heat Exchanger

The liquid to air heat exchanger utilizes radiator technology to transfer heat from a liquid to surrounding air. This is a simple closed loop system - it does not require a water supply from the user. However, this system requires surrounding air 5 to 10 °C below the maximum operating temperature of the drive. This type of cooling loop must be user supplied, it is not available from Rockwell Automation.

Chiller

The chiller utilizes refrigerant to transfer heat from a liquid to air. This is a simple closed loop system – it does not require a water supply from the user. A chiller can achieve almost any water temperature required. This type of cooling loop must be user supplied, it is not available from Rockwell Automation.

Hose Kits

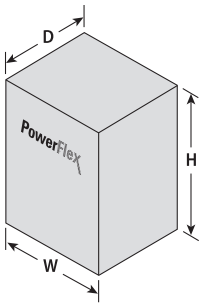
Hose Length m (ft)	Hoses per Kit	Drive Side Coupling Size	Heat Exchanger Side Coupling Size	Used with …	Hose Kit Cat. No. §
3 (10)	2	0.75 in.	0.75 in.	Frame 2 and user supplied liquid-liquid heat exchanger ‡	**20L-GH10-B1**
9.1 (30)	2	0.75 in.	0.75 in.	Frame 2 and user supplied liquid-liquid heat exchanger ‡	**20L-GH30-B1**
3 (10)	2	1 in.	1 in. with 90° Elbow	Frame 3A and user supplied liquid-liquid heat exchanger ‡	**20L-GH10-A2**
9.1 (30)	2	1 in.	1 in. with 90° Elbow	Frame 3A and user supplied liquid-liquid heat exchanger ‡	**20L-GH30-A2**
3 (10)	2	1 in.	1 in.	Frame 3B and user supplied liquid-liquid heat exchanger ‡	**20L-GH10-A1**
9.1 (30)	2	1 in.	1 in.	Frame 3B and user supplied liquid-liquid heat exchanger ‡	**20L-GH30-A1**

§ Each hose kit contains (2) hoses and the appropriate connectors.

‡ User must verify the coupling size on the heat exchanger.

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP20, NEMA/UL Type 1 ★

Frame	H	W	D	Weight
2	955.7 (37.63)	423.8 (16.68)	566.1 (22.29)	186.00 (410.0)
3A	2078.0 (81.90)	1200.0 (47.20)	600.0 (23.60)	950.00 (2090.0)
3B	2278.0 (89.80)	1600.0 (63.00)	800.0 (31.50)	1361.00 (3000.0)

★ Frames 3A and 3B Only. Frame 2 drives are IP00, NEMA/UL Type Open.

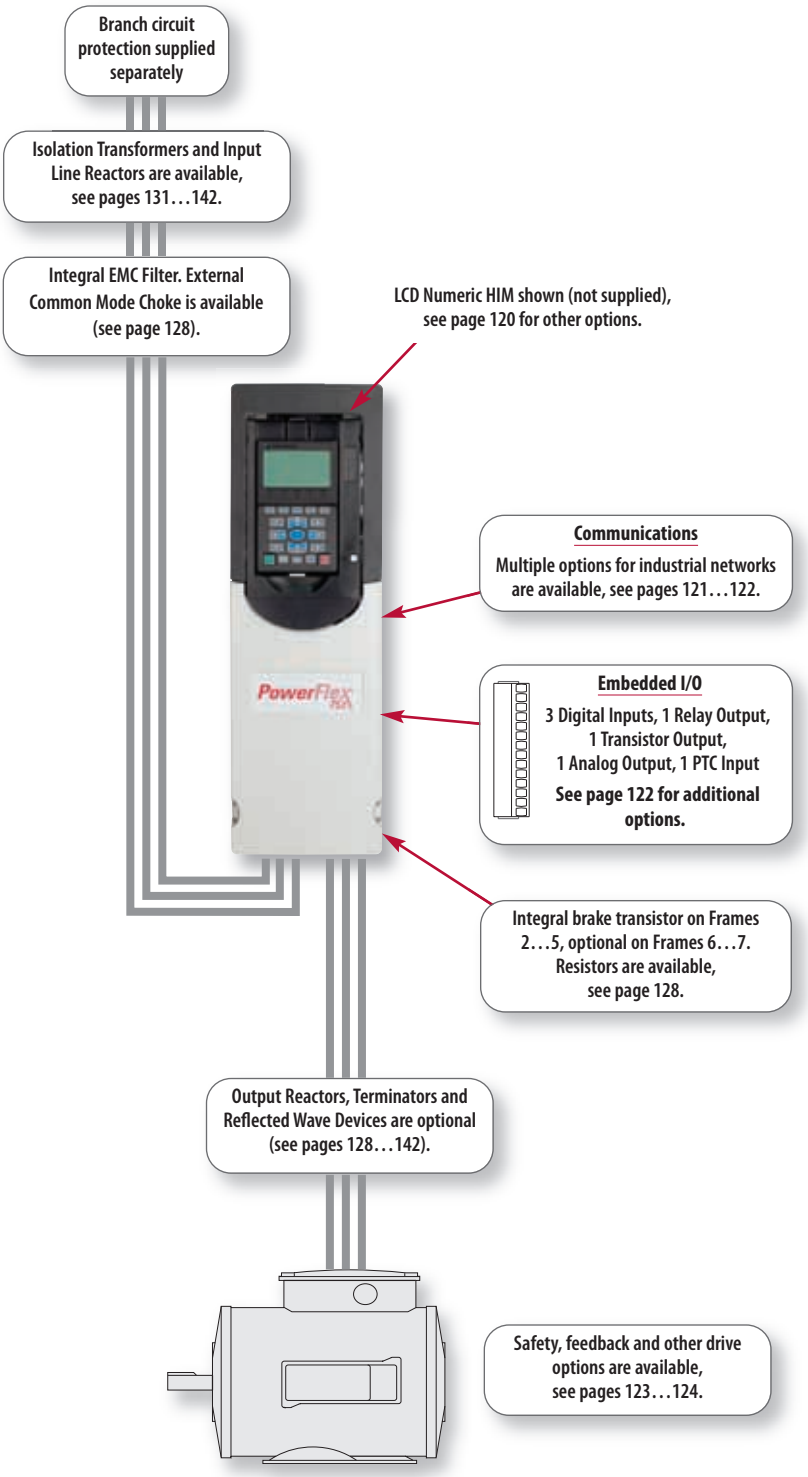
PowerFlex 753 AC Drive

Designed for general purpose applications, the PowerFlex 753 AC drive offers multiple options and features along with the added benefit of simple integration. The PowerFlex 753 comes standard with built-in I/O making it a cost effective solution ideal for OEMs and system integrators looking to reduce engineering costs, deliver machines to market faster and meet end-user demand for more productive and safer machines.

PowerFlex 753 at a glance

Ratings	
380…480V:	0.75…250 kW / 1.0…350 Hp / 2.1…456 A
600V:	1.0…300 Hp / 1.7…289 A
690V:	7.5…250 kW / 12…263 A
Motor Control	• V/Hz Control • Sensorless Vector Control • Vector Control with FORCE Technology (with and without encoder) • Interior Permanent Magnet with and without encoder
Enclosures	• IP00/IP20, NEMA/UL Type Open • Flange Mount • IP54/NEMA/UL Type 12
Safety	• Safe Torque-Off PLe/SIL3 Cat. 3 • Safe Speed Monitor PLe/SIL3 Cat. 4
Additional Features	• DeviceLogix • Predictive Diagnostics • Adjustable Voltage Control • Three option slots for I/O, feedback, safety, auxiliary control power, communications • Indexing • Pump Jack and Pump Off for oil well applications • Pjump and Traverse for Fibers application • Conformal Coating • DC Link Choke • Automatic Device Configuration★
Certifications	• ABS (Frames 2…7, 400/480V AC) • C-Tick • c-UL-us • CE • EPRI/SEMI F47 • GOST-R (Frames 2…7, 400/480V AC) • Lloyd's Register (Frames 2…7, 400/480V AC) • RINA (Frames 2…7, 400/480V AC) • RoHS compliant materials • TÜV FS ISO/EN13849-1 (EN954-1) with Safe Torque-Off option
Options	See pages 120…142

★ Requires Dual-port EtherNet/IP Option Module (Cat. No. 20-750-ENETR), firmware V7, Studio 5000 Logix Designer, and Drive Add-On Profiles Version 4.04 or higher.


Branch circuit protection supplied separately
Isolation Transformers and Input Line Reactors are available, see pages 131…142.
Integral EMC Filter. External Common Mode Choke is available (see page 128).
LCD Numeric HIM shown (not supplied), see page 120 for other options.
Communications
Multiple options for industrial networks are available, see pages 121…122.
Embedded I/O
3 Digital Inputs, 1 Relay Output, 1 Transistor Output, 1 Analog Output, 1 PTC Input
See page 122 for additional options.
Integral brake transistor on Frames 2…5, optional on Frames 6…7. Resistors are available, see page 128.
Output Reactors, Terminators and Reflected Wave Devices are optional (see pages 128…142).
Safety, feedback and other drive options are available, see pages 123…124.

Additional Information

PowerFlex 750-Series Product Profile, publication 750-PP001
PowerFlex 750-Series Technical Data, publication 750-TD001

Catalog Number Explanation

20F	1	A	N	D	248	A	A	0	N	N	N	N	N
		Input Type	Enclosure	Voltage Rating	Rating	Filtering & Common Mode Capacitor Configuration	Brake IGBT						

Product Selection

IP00/IP20, NEMA/UL Type Open &

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						Frame Size
Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps §			Normal Duty kW	Heavy Duty kW	Cat. No. ★	
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
2.1	2.3	3.2	1	0.5	**20F11RD2P1AA0NNNNN**	2.1	2.3	3.2	0.75	0.37	**20F11RC2P1JA0NNNNN**	1
3.4	3.7	5.1	2	1.5	**20F11RD3P4AA0NNNNN**	3.5	3.9	5.3	1.5	0.75	**20F11RC3P5JA0NNNNN**	1
5	5.5	7.5	3	2	**20F11RD5P0AA0NNNNN**	5	5.5	7.5	2.2	1.5	**20F11RC5P0JA0NNNNN**	1
8	8.8	12	5	3	**20F11RD8P0AA0NNNNN**	8.7	9.6	13.1	4	2.2	**20F11RC8P7JA0NNNNN**	1
11	12.1	16.5	7.5	5	**20F11RD011AA0NNNNN**	11.5	12.7	17.3	5.5	4	**20F11RC011JA0NNNNN**	1
14	15.4	21	10	7.5	**20F11RD014AA0NNNNN**	15.4	16.9	23.1	7.5	5.5	**20F11RC015JA0NNNNN**	1
2.1	3.1	3.7	1	1	**20F11ND2P1AA0NNNNN**	2.1	3.1	3.7	0.75	0.75	**20F11NC2P1JA0NNNNN**	2
3.4	5.1	6.1	2	2	**20F11ND3P4AA0NNNNN**	3.5	5.2	6.3	1.5	1.5	**20F11NC3P5JA0NNNNN**	2
5	7.5	9	3	3	**20F11ND5P0AA0NNNNN**	5	7.5	9.0	2.2	2.2	**20F11NC5P0JA0NNNNN**	2
8	12	14.4	5	5	**20F11ND8P0AA0NNNNN**	8.7	13	15.6	4	4	**20F11NC8P7JA0NNNNN**	2
11	16.5	19.8	7.5	7.5	**20F11ND011AA0NNNNN**	11.5	17.2	20.7	5.5	5.5	**20F11NC011JA0NNNNN**	2
14 (11)	15.4 (16.5)	21 (21)	10	7.5	**20F11ND014AA0NNNNN**	15.4 (11.5)	16.9 (17.3)	23.1 (23.1)	7.5	5.5	**20F11NC015JA0NNNNN**	2
22 (14)	24.2 (21)	33 (33)	15	10	**20F11ND022AA0NNNNN**	22 (15.4)	24.2 (23.1)	33 (33)	11	7.5	**20F11NC022JA0NNNNN**	2
27 (22)	29.7 (33)	40.5 (40.5)	20	15	**20F11ND027AA0NNNNN**	30 (22)	33 (33)	45 (45)	15	11	**20F11NC030JA0NNNNN**	3
34 (27)	37.4 (40.5)	51 (51)	25	20	**20F11ND034AA0NNNNN**	37 (30)	40.7 (45)	55.5 (55.5)	18.5	15	**20F11NC037JA0NNNNN**	3
40 (34)	44 (51)	60 (61.2)	30	25	**20F11ND040AA0NNNNN**	43 (37)	47.3 (55.5)	64.5 (66.6)	22	18.5	**20F11NC043JA0NNNNN**	3
52 (40)	57.2 (60)	78 (78)	40	30	**20F11ND052AA0NNNNN**	60 (43)	66 (66)	90 (90)	30	22	**20F11NC060JA0NNNNN**	4
65 (52)	71.5 (78)	97.5 (97.5)	50	40	**20F11ND065AA0NNNNN**	72 (60)	79.2 (90)	108 (108)	37	30	**20F11NC072JA0NNNNN**	4
77 (65)	84.7 (97.5)	116 (117)	60	50	**20F11ND077AA0NNNNN**	85 (72)	93.5 (108)	128 (130)	45	37	**20F11NC085JA0NNNNN**	5
96 (77)	106 (116)	144 (144)	75	60	**20F11ND096AA0NNNNN**	104 (85)	114 (128)	156 (156)	55	45	**20F11NC104JA0NNNNN**	5
125 (96)	138 (144)	188 (188)	100	75	**20F1AND125AN0NNNNN**	140 (104)	154 (156)	210 (210)	75	55	**20F1ANC140JN0NNNNN**	6 ♠
156 (125)	172 (188)	234 (234)	125	100	**20F1AND156AN0NNNNN**	170 (140)	187 (210)	255 (255)	90	75	**20F1ANC170JN0NNNNN**	6 ♠
186 (156)	205 (234)	279 (281)	150	125	**20F1AND186AN0NNNNN**	205 (170)	226 (255)	308 (308)	110	90	**20F1ANC205JN0NNNNN**	6 ♠
248 (186)	273 (279)	372 (372)	200	150	**20F1AND248AN0NNNNN**	260 (205)	286 (308)	390 (390)	132	110	**20F1ANC260JN0NNNNN**	6 ♠
302 (248)	332 (372)	453 (453)	250	200	**20F1AND302AN0NNNNN**	302 (260)	332 (390)	453 (468)	160	132	**20F1ANC302JN0NNNNN**	7 ♠
361 (302)	397 (453)	542 (544)	300	250	**20F1AND361AN0NNNNN**	367 (302)	404 (453)	551 (551)	200	160	**20F1ANC367JN0NNNNN**	7 ♠
415 (361)	457 (542)	623 (650)	350	300	**20F1AND415AN0NNNNN**	456 (367)	502 (551)	684 (684)	250	200	**20F1ANC456JN0NNNNN**	7 ♠

& Frames 2…5 are IP20, Frames 6…7 are IP00.

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

♠ Also available with internal Brake IGBT (20F1xxxxxxx **A** xxxxxx).

§ Some drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

IP00/IP20, NEMA/UL Type Open (continued)

Frames 3, 4 and 5 are 600V only drives. Frames 6 and 7 are dual voltage drives and can be operated at 600V or 690V AC.
Important: Frames 3, 4, and 5 must NOT be used in common DC input sharing applications with Frame 6 or larger drives. For details, contact your local Rockwell Automation sales office or Allen-Bradley Distributor.

DC Bus terminals are not supplied with AC input Frame 6 and 7 drives.

600V AC, Three-Phase Drives ♣

Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Frame Size
Cont.	1 Min.	3 Sec.				
1.7 (0.9)	1.9 (1.4)	2.6 (2.6)	1	0.5	**20F11NE1P7AA0NNNNN**	3
2.7 (1.7)	3.0 (2.6)	4.1 (4.6)	2	1	**20F11NE2P7AA0NNNNN**	3
3.9 (2.7)	4.3 (4.1)	5.9 (7.3)	3	2	**20F11NE3P9AA0NNNNN**	3
6.1 (3.9)	6.7 (5.9)	9.2 (10.5)	5	3	**20F11NE6P1AA0NNNNN**	3
9 (6.1)	9.9 (9.2)	13.5 (16.5)	7.5	5	**20F11NE9P0AA0NNNNN**	3
11 (9)	12.1 (13.5)	16.5 (24.3)	10	7.5	**20F11NE011AA0NNNNN**	3
17 (11)	18.7 (16.5)	25.5 (29.7)	15	10	**20F11NE017AA0NNNNN**	3
22 (17)	24 (26)	33 (46)	20	15	**20F11NE022AA0NNNNN**	3
27 (22)	30 (33)	41 (59)	25	20	**20F11NE027AA0NNNNN**	4
32 (27)	35 (41)	48 (73)	30	25	**20F11NE032AA0NNNNN**	4
41 (32)	45 (48)	62 (86)	40	30	**20F11NE041AA0NNNNN**	5
52 (41)	57 (62)	78 (111)	50	40	**20F11NE052AA0NNNNN**	5

§ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

600…690V AC, Three-Phase Drives ♣

600V AC Input						690V AC Input						Frame Size
Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps §			Normal Duty kW	Heavy Duty kW	Cat. No. ★	
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
12 (9.1)	13.2 (13.7)	18 (18)	10 ‡	7.5	**20F1ANE012AN0NNNNN**	12 (9)	13.2 (13.5)	18 (18)	7.5	5.5	**20F1ANF012JN0NNNNN**	6
18 (11.1)	19.8 (16.7)	27 (27)	15 ‡	10	**20F1ANE018AN0NNNNN**	15 (11.5)	16.5 (17.3)	22.5 (22.5)	11	7.5	**20F1ANF015JN0NNNNN**	6
23 (18)	25.3 (27)	34.5 (34.5)	20 ‡	15	**20F1ANE023AN0NNNNN**	20 (15)	22 (22.5)	30 (30)	15	11	**20F1ANF020JN0NNNNN**	6
24 (22)	26.4 (33)	36 (39.6)	20 ‡	20	**20F1ANE024AN0NNNNN**	23 (20)	25.3 (30)	34.5 (36)	18.5	15	**20F1ANF023JN0NNNNN**	6
28 (23)	30.8 (34.5)	42 (42)	25 ‡	20	**20F1ANE028AN0NNNNN**	30 (23)	33 (34.5)	45 (45)	22	18.5	**20F1ANF030JN0NNNNN**	6
33 (28)	36.3 (42)	49.5 (50.4)	30 ‡	25	**20F1ANE033AN0NNNNN**	34 (30)	37.4 (45)	51 (54)	30	22	**20F1ANF034JN0NNNNN**	6
42 (33)	46.2 (49.5)	63 (63)	40 ‡	30	**20F1ANE042AN0NNNNN**	46 (34)	50.6 (51)	69 (69)	37	30	**20F1ANF046JN0NNNNN**	6
53 (42)	58.3 (63)	79.5 (79.5)	50 ‡	40	**20F1ANE053AN0NNNNN**	50 (46)	55 (69)	75 (82.8)	45	37	**20F1ANF050JN0NNNNN**	6
63 (52)	69.3 (78)	94.5 (94.5)	60	50	**20F1ANE063AN0NNNNN**	61 (50)	67.1 (75)	91.5 (91.5)	55	45	**20F1ANF061JN0NNNNN**	6
77 (63)	84.7 (94.5)	116 (116)	75	60	**20F1ANE077AN0NNNNN**	82 (61)	90.2 (91.5)	123 (123)	75	55	**20F1ANF082JN0NNNNN**	6
99 (77)	109 (116)	149 (149)	100	75	**20F1ANE099AN0NNNNN**	98 (82)	108 (123)	147 (148)	90	75	**20F1ANF098JN0NNNNN**	6
125 (99)	138 (149)	188 (188)	125	100	**20F1ANE125AN0NNNNN**	119 (98)	131 (147)	179 (179)	110	90	**20F1ANF119JN0NNNNN**	6
144 (125)	158 (188)	216 (225)	150	125	**20F1ANE144AN0NNNNN**	142 (119)	156 (179)	213 (214)	132	110	**20F1ANF142JN0NNNNN**	6
192 (144)	211 (216)	288 (288)	200	150	**20F1ANE192AN0NNNNN**	171 (142)	188 (213)	257 (257)	160	132	**20F1ANF171JN0NNNNN**	7
242 (192)	266 (288)	363 (363)	250	200	**20F1ANE242AN0NNNNN**	212 (171)	233 (257)	318 (318)	200	160	**20F1ANF212JN0NNNNN**	7
289 (242)	318 (318)	434 (436)	300	250	**20F1ANE289AN0NNNNN**	263 (212)	289 (289)	395 (395)	250	200	**20F1ANF263JN0NNNNN**	7

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.
‡ Alternate 600V ratings when connected to drives 60 Hp and greater in common DC input applications with uncontrolled front ends (such as AFE).
§ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

Flange Mount
Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP66, NEMA/UL Type 4X

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						
Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps §			Normal Duty kW	Heavy Duty kW	Cat. No. ★	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
2.1	3.1	3.7	1	1	**20F11FD2P1AA0NNNNN**	2.1	3.1	3.7	0.75	0.75	**20F11FC2P1JA0NNNNN**	2
3.4	5.1	6.1	2	2	**20F11FD3P4AA0NNNNN**	3.5	5.2	6.3	1.5	1.5	**20F11FC3P5JA0NNNNN**	2
5	7.5	9	3	3	**20F11FD5P0AA0NNNNN**	5	7.5	9.0	2.2	2.2	**20F11FC5P0JA0NNNNN**	2
8	12	14.4	5	5	**20F11FD8P0AA0NNNNN**	8.7	13	15.6	4	4	**20F11FC8P7JA0NNNNN**	2
11	16.5	19.8	7.5	7.5	**20F11FD011AA0NNNNN**	11.5	17.2	20.7	5.5	5.5	**20F11FC011JA0NNNNN**	2
14 (11)	15.4 (16.5)	21 (21)	10	7.5	**20F11FD014AA0NNNNN**	15.4 (11.5)	16.9 (17.3)	23.1 (23.1)	7.5	5.5	**20F11FC015JA0NNNNN**	2
22 (14)	24.2 (21)	33 (33)	15	10	**20F11FD022AA0NNNNN**	22 (15.4)	24.2 (23.1)	33 (33)	11	7.5	**20F11FC022JA0NNNNN**	2
27 (22)	29.7 (33)	40.5 (40.5)	20	15	**20F11FD027AA0NNNNN**	30 (22)	33 (33)	45 (45)	15	11	**20F11FC030JA0NNNNN**	3
34 (27)	37.4 (40.5)	51 (51)	25	20	**20F11FD034AA0NNNNN**	37 (30)	40.7 (45)	55.5 (55.5)	18.5	15	**20F11FC037JA0NNNNN**	3
40 (34)	44 (51)	60 (61.2)	30	25	**20F11FD040AA0NNNNN**	43 (37)	47.3 (55.5)	64.5 (66.6)	22	18.5	**20F11FC043JA0NNNNN**	3
52 (40)	57.2 (60)	78 (78)	40	30	**20F11FD052AA0NNNNN**	60 (43)	66 (66)	90 (90)	30	22	**20F11FC060JA0NNNNN**	4
65 (52)	71.5 (78)	97.5 (97.5)	50	40	**20F11FD065AA0NNNNN**	72 (60)	79.2 (90)	108 (108)	37	30	**20F11FC072JA0NNNNN**	4
77 (65)	84.7 (97.5)	116 (117)	60	50	**20F11FD077AA0NNNNN**	85 (72)	93.5 (108)	128 (130)	45	37	**20F11FC085JA0NNNNN**	5
96 (77)	106 (116)	144 (144)	75	60	**20F11FD096AA0NNNNN**	104 (85)	114 (128)	156 (156)	55	45	**20F11FC104JA0NNNNN**	5

Note: Frames 6…7 require a user installed flange kit with an IP00, NEMA/UL Type Open drive.

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

§ Some drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

600V AC, Three-Phase Drives ♣

Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Frame Size
Cont.	1 Min.	3 Sec.				
1.7 (0.9)	1.9 (1.4)	2.6 (2.6)	1	0.5	**20F11FE1P7AA0NNNNN**	3
2.7 (1.7)	3.0 (2.6)	4.1 (4.6)	2	1	**20F11FE2P7AA0NNNNN**	3
3.9 (2.7)	4.3 (4.1)	5.9 (7.3)	3	2	**20F11FE3P9AA0NNNNN**	3
6.1 (3.9)	6.7 (5.9)	9.2 (10.5)	5	3	**20F11FE6P1AA0NNNNN**	3
9 (6.1)	9.9 (9.2)	13.5 (16.5)	7.5	5	**20F11FE9P0AA0NNNNN**	3
11 (9)	12.1 (13.5)	16.5 (24.3)	10	7.5	**20F11FE011AA0NNNNN**	3
17 (11)	18.7 (16.5)	25.5 (29.7)	15	10	**20F11FE017AA0NNNNN**	3
22 (17)	24 (26)	33 (46)	20	15	**20F11FE022AA0NNNNN**	3
27 (22)	30 (33)	41 (59)	25	20	**20F11FE027AA0NNNNN**	4
32 (27)	35 (41)	48 (73)	30	25	**20F11FE032AA0NNNNN**	4
41 (32)	45 (48)	62 (86)	40	30	**20F11FE041AA0NNNNN**	5
52 (41)	57 (62)	78 (111)	50	40	**20F11FE052AA0NNNNN**	5

§ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

IP54, NEMA/UL Type 12

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						
Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps §			Normal Duty kW	Heavy Duty kW	Cat. No. ★	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
2.1	3.1	3.7	1	1	**20F11GD2P1AA0NNNNN**	2.1	3.1	3.7	0.75	0.75	**20F11GC2P1JA0NNNNN**	2
3.4	5.1	6.1	2	2	**20F11GD3P4AA0NNNNN**	3.5	5.2	6.3	1.5	1.5	**20F11GC3P5JA0NNNNN**	2
5	7.5	9	3	3	**20F11GD5P0AA0NNNNN**	5	7.5	9.0	2.2	2.2	**20F11GC5P0JA0NNNNN**	2
8	12	14.4	5	5	**20F11GD8P0AA0NNNNN**	8.7	13	15.6	4	4	**20F11GC8P7JA0NNNNN**	2
11	16.5	19.8	7.5	7.5	**20F11GD011AA0NNNNN**	11.5	17.2	20.7	5.5	5.5	**20F11GC011JA0NNNNN**	2
14 (11)	15.4 (16.5)	21 (21)	10	7.5	**20F11GD014AA0NNNNN**	15.4 (11.5)	16.9 (17.3)	23.1 (23.1)	7.5	5.5	**20F11GC015JA0NNNNN**	2
22 (14)	24.2 (21)	33 (33)	15	10	**20F11GD022AA0NNNNN**	22 (15.4)	24.2 (23.1)	33 (33)	11	7.5	**20F11GC022JA0NNNNN**	2
27 (22)	29.7 (33)	40.5 (40.5)	20	15	**20F11GD027AA0NNNNN**	30 (22)	33 (33)	45 (45)	15	11	**20F11GC030JA0NNNNN**	3
34 (27)	37.4 (40.5)	51 (51)	25	20	**20F11GD034AA0NNNNN**	37 (30)	40.7 (45)	55.5 (55.5)	18.5	15	**20F11GC037JA0NNNNN**	3
40 (34)	44 (51)	60 (61.2)	30	25	**20F11GD040AA0NNNNN**	43 (37)	47.3 (55.5)	64.5 (66.6)	22	18.5	**20F11GC043JA0NNNNN**	3
52 (40)	57.2 (60)	78 (78)	40	30	**20F11GD052AA0NNNNN**	60 (43)	66 (66)	90 (90)	30	22	**20F11GC060JA0NNNNN**	4
65 (52)	71.5 (78)	97.5 (97.5)	50	40	**20F11GD065AA0NNNNN**	72 (60)	79.2 (90)	108 (108)	37	30	**20F11GC072JA0NNNNN**	5
77 (65)	84.7 (97.5)	116 (117)	60	50	**20F11GD077AA0NNNNN**	85 (72)	93.5 (108)	128 (130)	45	37	**20F11GC085JA0NNNNN**	5
96 (77)	106 (116)	144 (144)	75	60	**20F1AGD096AN0NNNNN**	104 (85)	114 (128)	156 (156)	55	45	**20F1AGC104JN0NNNNN**	6 ♠
125 (96)	138 (144)	188 (188)	100	75	**20F1AGD125AN0NNNNN**	140 (104)	154 (156)	210 (210)	75	55	**20F1AGC140JN0NNNNN**	6 ♠
156 (125)	172 (188)	234 (234)	125	100	**20F1AGD156AN0NNNNN**	170 (140)	187 (210)	255 (255)	90	75	**20F1AGC170JN0NNNNN**	6 ♠
186 (156)	205 (234)	279 (281)	150	125	**20F1AGD186AN0NNNNN**	205 (170)	226 (255)	308 (308)	110	90	**20F1AGC205JN0NNNNN**	6 ♠
248 (186)	273 (279)	372 (372)	200	150	**20F1AGD248AN0NNNNN**	260 (205)	286 (308)	390 (390)	132	110	**20F1AGC260JN0NNNNN**	7 ♠
302 (248)	332 (372)	453 (453)	250	200	**20F1AGD302AN0NNNNN**	302 (260)	332 (390)	453 (468)	160	132	**20F1AGC302JN0NNNNN**	7 ♠
361 (302)	397 (453)	542 (544)	300	250	**20F1AGD361AN0NNNNN**	367 (302)	404 (453)	551 (551)	200	160	**20F1AGC367JN0NNNNN**	7 ♠
415 (361)	457 (542)	623 (650)	350	300	**20F1AGD415AN0NNNNN**	456 (367)	502 (551)	684 (684)	250	200	**20F1AGC456JN0NNNNN**	7 ♠

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

♠ Also available with internal Brake IGBT (20F1xxxxxxx **A** xxxxxx).

§ Some drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

Frames 3, 4 and 5 are 600V only drives. Frames 6 and 7 are dual voltage drives and can be operated at 600V or 690V AC.
Important: Frames 3, 4, and 5 must NOT be used in common DC input sharing applications with Frame 6 or larger drives. For details, contact your local Rockwell Automation sales office or Allen-Bradley Distributor.

DC Bus terminals are not supplied with AC input Frame 6 and 7 drives.

600V AC, Three-Phase Drives ♣

Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Frame Size
Cont.	1 Min.	3 Sec.				
1.7 (0.9)	1.9 (1.4)	2.6 (2.6)	1	0.5	**20F11GE1P7AA0NNNNN**	3
2.7 (1.7)	3.0 (2.6)	4.1 (4.6)	2	1	**20F11GE2P7AA0NNNNN**	3
3.9 (2.7)	4.3 (4.1)	5.9 (7.3)	3	2	**20F11GE3P9AA0NNNNN**	3
6.1 (3.9)	6.7 (5.9)	9.2 (10.5)	5	3	**20F11GE6P1AA0NNNNN**	3
9 (6.1)	9.9 (9.2)	13.5 (16.5)	7.5	5	**20F11GE9P0AA0NNNNN**	3
11 (9)	12.1 (13.5)	16.5 (24.3)	10	7.5	**20F11GE011AA0NNNNN**	3
17 (11)	18.7 (16.5)	25.5 (29.7)	15	10	**20F11GE017AA0NNNNN**	3
22 (17)	24 (26)	33 (46)	20	15	**20F11GE022AA0NNNNN**	3
27 (22)	30 (33)	41 (59)	25	20	**20F11GE027AA0NNNNN**	4
32 (27)	35 (41)	48 (73)	30	25	**20F11GE032AA0NNNNN**	4
41 (32)	45 (48)	62 (86)	40	30	**20F11GE041AA0NNNNN**	5
52 (41)	57 (62)	78 (111)	50	40	**20F11GE052AA0NNNNN**	5

§ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

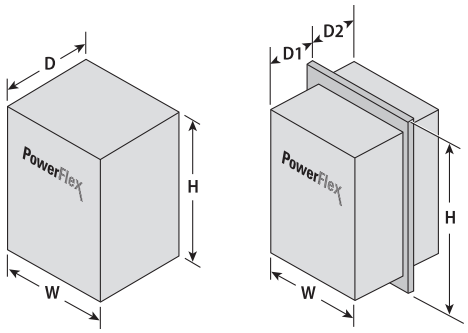
600…690V AC, Three-Phase Drives ♣

600V AC Input						690V AC Input						Frame Size
Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps §			Normal Duty kW	Heavy Duty kW	Cat. No. ★	
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
12 (9.1)	13.2 (13.7)	18 (18)	10 ‡	7.5	**20F1AGE012AN0NNNNN**	12 (9)	13.2 (13.5)	18 (18)	7.5	5.5	**20F1AGF012JN0NNNNN**	6
18 (11.1)	19.8 (16.7)	27 (27)	15 ‡	10	**20F1AGE018AN0NNNNN**	15 (11.5)	16.5 (17.3)	22.5 (22.5)	11	7.5	**20F1AGF015JN0NNNNN**	6
23 (18)	25.3 (27)	34.5 (34.5)	20 ‡	15	**20F1AGE023AN0NNNNN**	20 (15)	22 (22.5)	30 (30)	15	11	**20F1AGF020JN0NNNNN**	6
24 (22)	26.4 (33)	36 (39.6)	20 ‡	20	**20F1AGE024AN0NNNNN**	23 (20)	25.3 (30)	34.5 (36)	18.5	15	**20F1AGF023JN0NNNNN**	6
28 (23)	30.8 (34.5)	42 (42)	25 ‡	20	**20F1AGE028AN0NNNNN**	30 (23)	33 (34.5)	45 (45)	22	18.5	**20F1AGF030JN0NNNNN**	6
33 (28)	36.3 (42)	49.5 (50.4)	30 ‡	25	**20F1AGE033AN0NNNNN**	34 (30)	37.4 (45)	51 (54)	30	22	**20F1AGF034JN0NNNNN**	6
42 (33)	46.2 (49.5)	63 (63)	40 ‡	30	**20F1AGE042AN0NNNNN**	46 (34)	50.6 (51)	69 (69)	37	30	**20F1AGF046JN0NNNNN**	6
53 (42)	58.3 (63)	79.5 (79.5)	50 ‡	40	**20F1AGE053AN0NNNNN**	50 (46)	55 (69)	75 (82.8)	45	37	**20F1AGF050JN0NNNNN**	6
63 (52)	69.3 (78)	94.5 (94.5)	60	50	**20F1AGE063AN0NNNNN**	61 (50)	67.1 (75)	91.5 (91.5)	55	45	**20F1AGF061JN0NNNNN**	6
77 (63)	84.7 (94.5)	116 (116)	75	60	**20F1AGE077AN0NNNNN**	82 (61)	90.2 (91.5)	123 (123)	75	55	**20F1AGF082JN0NNNNN**	6
99 (77)	109 (116)	149 (149)	100	75	**20F1AGE099AN0NNNNN**	98 (82)	108 (123)	147 (148)	90	75	**20F1AGF098JN0NNNNN**	6
125 (99)	138 (149)	188 (188)	125	100	**20F1AGE125AN0NNNNN**	119 (98)	131 (147)	179 (179)	110	90	**20F1AGF119JN0NNNNN**	6
144 (125)	158 (188)	216 (225)	150	125	**20F1AGE144AN0NNNNN**	142 (119)	156 (179)	213 (214)	132	110	**20F1AGF142JN0NNNNN**	6
192 (144)	211 (216)	288 (288)	200	150	**20F1AGE192AN0NNNNN**	171 (142)	188 (213)	257 (257)	160	132	**20F1AGF171JN0NNNNN**	7
242 (192)	266 (288)	363 (363)	250	200	**20F1AGE242AN0NNNNN**	212 (171)	233 (257)	318 (318)	200	160	**20F1AGF212JN0NNNNN**	7
289 (242)	318 (318)	434 (436)	300	250	**20F1AGE289AN0NNNNN**	263 (212)	289 (289)	395 (395)	250	200	**20F1AGF263JN0NNNNN**	7

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.
‡ Alternate 600V ratings when connected to drives 60 Hp and greater in common DC input applications with uncontrolled front ends (such as AFE).
§ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP00/IP20, NEMA/UL Type Open

Frame	H	W	D	Weight
1	400.5 (15.77)	110.0 (4.33)	211.0 (8.31)	6.00 (12.75)
2	424.2 (16.70)	134.5 (5.30)	212.0 (8.35)	7.80 (17.2)
3	454.0 (17.87)	190.0 (7.48)	212.0 (8.35)	11.80 (26.1)
4	474.0 (18.66)	222.0 (8.74)	212.0 (8.35)	13.60 (30.0)
5	550.0 (21.65)	270.0 (10.63)	212.0 (8.35)	20.40 (45.0)
6	665.5 (26.20)	308.0 (12.13)	346.4 (13.64)	38.60 (85.0)
7	881.5 (34.70)	430.0 (16.93)	349.6 (13.76)	72.60…108.90 (160.0…240.0)

Flange Mount

Frame	H	W	D1	D2	Weight ★
2	481.8 (18.97)	206.2 (8.12)	148.3 (5.84)	63.7 (2.51)	8.00 (17.0)
3	515.0 (20.28)	260.0 (10.24)	127.4 (5.02)	84.6 (3.33)	12.00 (26.0)
4	535.0 (21.06)	292.0 (11.50)	127.4 (5.02)	84.6 (3.33)	14.00 (30.0)
5	611.0 (24.06)	340.0 (13.39)	127.4 (5.02)	84.6 (3.33)	20.00 (45.0)
6	665.5 (26.20)	308.0 (12.13)	208.4 (8.20)	138.0 (5.43)	38.00 (84.0)
7	875.0 (34.45)	430.0 (16.93)	208.4 (8.20)	138.0 (5.43)	96.00 (212.0)

★ Weights are approximate. Refer to the PowerFlex 750-Series Technical Data for detailed weight information.

IP54, NEMA/UL Type 12

Frame	H	W	D	Weight ★
2	543.2 (21.39)	215.3 (8.48)	222.2 (8.75)	8.00 (17.0)
3	551.0 (21.69)	268.0 (10.55)	220.1 (8.67)	12.00 (26.0)
4	571.0 (22.48)	300.0 (11.81)	220.1 (8.67)	14.00 (30.0)
5	647.0 (25.47)	348.0 (13.70)	220.1 (8.67)	20.00 (45.0)
6	1298.3 (51.11)	609.4 (23.99)	464.7 (18.30)	91.00 (200.0)
7	1614.0 (63.54)	609.4 (23.99)	464.7 (18.30)	162.00 (357.0)

★ Weights are approximate. Refer to the PowerFlex 750-Series Technical Data for detailed weight information.

Notes

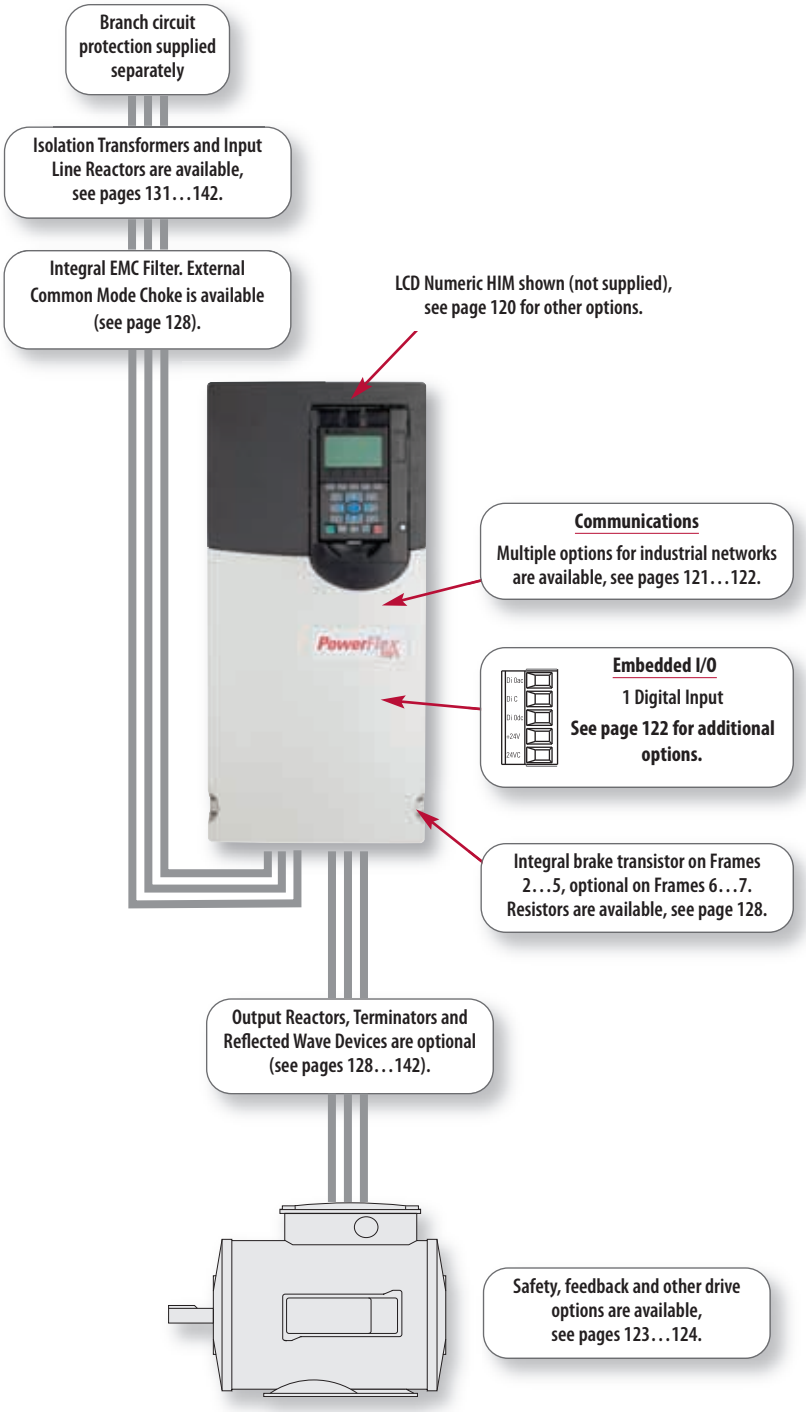
PowerFlex 755 AC Drive

Designed for ease of integration, application flexibility and performance the PowerFlex 755 AC drive provides improved functionality across many manufacturing systems. The PowerFlex 755 AC drive is designed to maximize user's investment and help improve productivity. Ideal for applications that require safety, high motor control performance, and application flexibility, the PowerFlex 755 is highly functional and cost effective solution.

The PowerFlex 755 AC drive can be configured with drive instructions embedded in Allen-Bradley Logix Programmable Automation Controllers (PAC).

PowerFlex 755 at a glance

Ratings	
380…480V:	0.75…1400 kW / 1.0…2000 Hp / 2.1…2330 A
600V:	1.0…1500 Hp / 1.7…1530 A
690V:	7.5…1500 kW / 12…1485 A
Motor Control	• V/Hz Control • Sensorless Vector Control • Vector Control with FORCE Technology (with and without encoder) • Surface Mount Permanent Magnet: Frames 2…7 (with and without encoder) Frames 8…10 (with encoder) Interior Permanent Magnet with and without encoder
Enclosures	• IP00/IP20, NEMA/UL Type Open • Flange Mount • IP54/NEMA/UL Type 12 • IP20, NEMA/UL Type 1 (MCC Style Cabinet) • IP54, NEMA Type 12 (MCC Style Cabinet)
Safety	• Safe Torque-Off PLe/SIL3 Cat. 3 • Safe Speed Monitor PLe/SIL3 Cat. 4
Additional Features	• Automatic Device Configuration • Configure and control with embedded instruction sets in Studio 5000 Logix Designer • Predictive Diagnostics • Embedded EtherNet/IP port • Five option slots for I/O, feedback, safety, auxiliary control power, communications • Accurate positioning with PCAM, Indexer, Electronic Gearing, and speed/position profiling • Incremental and Absolute feedback supported • TorqProve for lifting applications • Pump Jack and Pump Off for oil well applications • Pjump and Traverse for Fibers application • Conformal Coating • DC Link Choke • AC line fuses included with Frame 8…10 drives • Roll-out design for Frame 8…10 drives
Certifications	• ABS (Frames 2…8, 400/480V AC) • C-Tick • c-UL-us • CE • EPRI/SEMI F47 • GOST-R (Frames 2…8, 400/480V AC) • Lloyd's Register (Frames 2…8, 400/480V AC) • RINA (Frames 2…8, 400/480V AC) • RoHS compliant materials • TÜV FS ISO/EN13849-1 (EN954-1) with Safe Torque-Off option
Options	See pages 120…142


Branch circuit protection supplied separately
Isolation Transformers and Input Line Reactors are available, see pages 131…142.
Integral EMC Filter. External Common Mode Choke is available (see page 128).
LCD Numeric HIM shown (not supplied), see page 120 for other options.
Communications
Multiple options for industrial networks are available, see pages 121…122.
Embedded I/O
1 Digital Input
See page 122 for additional options.
Integral brake transistor on Frames 2…5, optional on Frames 6…7. Resistors are available, see page 128.
Output Reactors, Terminators and Reflected Wave Devices are optional (see pages 128…142).
Safety, feedback and other drive options are available, see pages 123…124.

Additional Information

PowerFlex 750-Series Product Profile, publication 750-PP001
PowerFlex 750-Series Technical Data, publication 750-TD001

Catalog Number Explanation

20G	1	A	N	D	248	A	A	0	N	N	N	N	N	- LD - P3 - P11…
		Input Type	Enclosure	Voltage Rating	Rating	Filtering & Common Mode Capacitor Configuration	Brake IGBT							Cabinet Options (21G)

Product Selection

IP00/IP20, NEMA/UL Type Open ♣

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						Frame Size
Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps §			Normal Duty kW	Heavy Duty kW	Cat. No. ★	
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
2.1	2.3	3.2	1	0.5	**20G11RD2P1AA0NNNNN**	2.1	2.3	3.2	0.75	0.37	**20G11RC2P1JA0NNNNN**	1
3.4	3.7	5.1	2	1.5	**20G11RD3P4AA0NNNNN**	3.5	3.9	5.3	1.5	0.75	**20G11RC3P5JA0NNNNN**	1
5	5.5	7.5	3	2	**20G11RD5P0AA0NNNNN**	5	5.5	7.5	2.2	1.5	**20G11RC5P0JA0NNNNN**	1
8	8.8	12	5	3	**20G11RD8P0AA0NNNNN**	8.7	9.6	13.1	4	2.2	**20G11RC8P7JA0NNNNN**	1
11	12.1	16.5	7.5	5	**20G11RD011AA0NNNNN**	11.5	12.7	17.3	5.5	4	**20G11RC011JA0NNNNN**	1
14	15.4	21	10	7.5	**20G11RD014AA0NNNNN**	15.4	16.9	23.1	7.5	5.5	**20G11RC015JA0NNNNN**	1
2.1	3.1	3.7	1	1	**20G11ND2P1AA0NNNNN**	2.1	3.1	3.7	0.75	0.75	**20G11NC2P1JA0NNNNN**	2
3.4	5.1	6.1	2	2	**20G11ND3P4AA0NNNNN**	3.5	5.2	6.3	1.5	1.5	**20G11NC3P5JA0NNNNN**	2
5	7.5	9	3	3	**20G11ND5P0AA0NNNNN**	5	7.5	9.0	2.2	2.2	**20G11NC5P0JA0NNNNN**	2
8	12	14.4	5	5	**20G11ND8P0AA0NNNNN**	8.7	13	15.6	4	4	**20G11NC8P7JA0NNNNN**	2
11	16.5	19.8	7.5	7.5	**20G11ND011AA0NNNNN**	11.5	17.2	20.7	5.5	5.5	**20G11NC011JA0NNNNN**	2
14 (11)	15.4 (16.5)	21 (21)	10	7.5	**20G11ND014AA0NNNNN**	15.4 (11.5)	16.9 (17.3)	23.1 (23.1)	7.5	5.5	**20G11NC015JA0NNNNN**	2
22 (14)	24.2 (21)	33 (33)	15	10	**20G11ND022AA0NNNNN**	22 (15.4)	24.2 (23.1)	33 (33)	11	7.5	**20G11NC022JA0NNNNN**	2
27 (22)	29.7 (33)	40.5 (40.5)	20	15	**20G11ND027AA0NNNNN**	30 (22)	33 (33)	45 (45)	15	11	**20G11NC030JA0NNNNN**	3
34 (27)	37.4 (40.5)	51 (51)	25	20	**20G11ND034AA0NNNNN**	37 (30)	40.7 (45)	55.5 (55.5)	18.5	15	**20G11NC037JA0NNNNN**	3
40 (34)	44 (51)	60 (61.2)	30	25	**20G11ND040AA0NNNNN**	43 (37)	47.3 (55.5)	64.5 (66.6)	22	18.5	**20G11NC043JA0NNNNN**	3
52 (40)	57.2 (60)	78 (78)	40	30	**20G11ND052AA0NNNNN**	60 (43)	66 (66)	90 (90)	30	22	**20G11NC060JA0NNNNN**	4
65 (52)	71.5 (78)	97.5 (97.5)	50	40	**20G11ND065AA0NNNNN**	72 (60)	79.2 (90)	108 (108)	37	30	**20G11NC072JA0NNNNN**	4
77 (65)	84.7 (97.5)	116 (117)	60	50	**20G11ND077AA0NNNNN**	85 (72)	93.5 (108)	128 (130)	45	37	**20G11NC085JA0NNNNN**	5
96 (77)	106 (116)	144 (144)	75	60	**20G11ND096AA0NNNNN**	104 (85)	114 (128)	156 (156)	55	45	**20G11NC104JA0NNNNN**	5
125 (96)	138 (144)	188 (188)	100	75	**20G1AND125AN0NNNNN**	140 (104)	154 (156)	210 (210)	75	55	**20G1ANC140JN0NNNNN**	6 ♠
156 (125)	172 (188)	234 (234)	125	100	**20G1AND156AN0NNNNN**	170 (140)	187 (210)	255 (255)	90	75	**20G1ANC170JN0NNNNN**	6 ♠
186 (156)	205 (234)	279 (281)	150	125	**20G1AND186AN0NNNNN**	205 (170)	226 (255)	308 (308)	110	90	**20G1ANC205JN0NNNNN**	6 ♠
248 (186)	273 (279)	372 (372)	200	150	**20G1AND248AN0NNNNN**	260 (205)	286 (308)	390 (390)	132	110	**20G1ANC260JN0NNNNN**	6 ♠
302 (248)	332 (372)	453 (453)	250	200	**20G1AND302AN0NNNNN**	302 (260)	332 (390)	453 (468)	160	132	**20G1ANC302JN0NNNNN**	7 ♠
361 (302)	397 (453)	542 (544)	300	250	**20G1AND361AN0NNNNN**	367 (302)	404 (453)	551 (551)	200	160	**20G1ANC367JN0NNNNN**	7 ♠
415 (361)	457 (542)	623 (650)	350	300	**20G1AND415AN0NNNNN**	456 (367)	502 (551)	684 (684)	250	200	**20G1ANC456JN0NNNNN**	7 ♠

♣ Frames 2…5 are IP20, Frames 6…7 are IP00.

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

♠ Also available with internal Brake IGBT (20G1xxxxxxx **A** xxxxxx).

§ Some drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

IP00/IP20, NEMA/UL Type Open (continued)

Frames 3, 4 and 5 are 600V only drives. Frames 6 and 7 are dual voltage drives and can be operated at 600V or 690V AC. **Important:** Frames 3, 4, and 5 must NOT be used in common DC input sharing applications with Frame 6 or larger drives. For details, contact your local Rockwell Automation sales office or Allen-Bradley Distributor.

DC Bus terminals are not supplied with AC input Frame 6 and 7 drives.

600V AC, Three-Phase Drives ♣

Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Frame Size
Cont.	1 Min.	3 Sec.				
1.7 (0.9)	1.9 (1.4)	2.6 (2.6)	1	0.5	**20G11NE1P7AA0NNNNN**	3
2.7 (1.7)	3.0 (2.6)	4.1 (4.6)	2	1	**20G11NE2P7AA0NNNNN**	3
3.9 (2.7)	4.3 (4.1)	5.9 (7.3)	3	2	**20G11NE3P9AA0NNNNN**	3
6.1 (3.9)	6.7 (5.9)	9.2 (10.5)	5	3	**20G11NE6P1AA0NNNNN**	3
9 (6.1)	9.9 (9.2)	13.5 (16.5)	7.5	5	**20G11NE9P0AA0NNNNN**	3
11 (9)	12.1 (13.5)	16.5 (24.3)	10	7.5	**20G11NE011AA0NNNNN**	3
17 (11)	18.7 (16.5)	25.5 (29.7)	15	10	**20G11NE017AA0NNNNN**	3
22 (17)	24 (26)	33 (46)	20	15	**20G11NE022AA0NNNNN**	3
27 (22)	30 (33)	41 (59)	25	20	**20G11NE027AA0NNNNN**	4
32 (27)	35 (41)	48 (73)	30	25	**20G11NE032AA0NNNNN**	4
41 (32)	45 (48)	62 (86)	40	30	**20G11NE041AA0NNNNN**	5
52 (41)	57 (62)	78 (111)	50	40	**20G11NE052AA0NNNNN**	5

§ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

600…690V AC, Three-Phase Drives ♣

600V AC Input						690V AC Input						Frame Size
Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps §			Normal Duty kW	Heavy Duty kW	Cat. No. ★	
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
12 (9.1)	13.2 (13.7)	18 (18)	10 ‡	7.5	**20G1ANE012AN0NNNNN**	12 (9)	13.2 (13.5)	18 (18)	7.5	5.5	**20G1ANF012JN0NNNNN**	6
18 (11.1)	19.8 (16.7)	27 (27)	15 ‡	10	**20G1ANE018AN0NNNNN**	15 (11.5)	16.5 (17.3)	22.5 (22.5)	11	7.5	**20G1ANF015JN0NNNNN**	6
23 (18)	25.3 (27)	34.5 (34.5)	20 ‡	15	**20G1ANE023AN0NNNNN**	20 (15)	22 (22.5)	30 (30)	15	11	**20G1ANF020JN0NNNNN**	6
24 (22)	26.4 (33)	36 (39.6)	20 ‡	20	**20G1ANE024AN0NNNNN**	23 (20)	25.3 (30)	34.5 (36)	18.5	15	**20G1ANF023JN0NNNNN**	6
28 (23)	30.8 (34.5)	42 (42)	25 ‡	20	**20G1ANE028AN0NNNNN**	30 (23)	33 (34.5)	45 (45)	22	18.5	**20G1ANF030JN0NNNNN**	6
33 (28)	36.3 (42)	49.5 (50.4)	30 ‡	25	**20G1ANE033AN0NNNNN**	34 (30)	37.4 (45)	51 (54)	30	22	**20G1ANF034JN0NNNNN**	6
42 (33)	46.2 (49.5)	63 (63)	40 ‡	30	**20G1ANE042AN0NNNNN**	46 (34)	50.6 (51)	69 (69)	37	30	**20G1ANF046JN0NNNNN**	6
53 (42)	58.3 (63)	79.5 (79.5)	50 ‡	40	**20G1ANE053AN0NNNNN**	50 (46)	55 (69)	75 (82.8)	45	37	**20G1ANF050JN0NNNNN**	6
63 (52)	69.3 (78)	94.5 (94.5)	60	50	**20G1ANE063AN0NNNNN**	61 (50)	67.1 (75)	91.5 (91.5)	55	45	**20G1ANF061JN0NNNNN**	6
77 (63)	84.7 (94.5)	116 (116)	75	60	**20G1ANE077AN0NNNNN**	82 (61)	90.2 (91.5)	123 (123)	75	55	**20G1ANF082JN0NNNNN**	6
99 (77)	109 (116)	149 (149)	100	75	**20G1ANE099AN0NNNNN**	98 (82)	108 (123)	147 (148)	90	75	**20G1ANF098JN0NNNNN**	6
125 (99)	138 (149)	188 (188)	125	100	**20G1ANE125AN0NNNNN**	119 (98)	131 (147)	179 (179)	110	90	**20G1ANF119JN0NNNNN**	6
144 (125)	158 (188)	216 (225)	150	125	**20G1ANE144AN0NNNNN**	142 (119)	156 (179)	213 (214)	132	110	**20G1ANF142JN0NNNNN**	6
192 (144)	211 (216)	288 (288)	200	150	**20G1ANE192AN0NNNNN**	171 (142)	188 (213)	257 (257)	160	132	**20G1ANF171JN0NNNNN**	7
242 (192)	266 (288)	363 (363)	250	200	**20G1ANE242AN0NNNNN**	212 (171)	233 (257)	318 (318)	200	160	**20G1ANF212JN0NNNNN**	7
289 (242)	318 (318)	434 (436)	300	250	**20G1ANE289AN0NNNNN**	263 (212)	289 (289)	395 (395)	250	200	**20G1ANF263JN0NNNNN**	7

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.
‡ Alternate 600V ratings when connected to drives 60 Hp and greater in common DC input applications with uncontrolled front ends (such as AFE).
§ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

Flange Mount
Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP66, NEMA/UL Type 4X

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						
Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps §			Normal Duty kW	Heavy Duty kW	Cat. No. ★	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
2.1	3.1	3.7	1	1	**20G11FD2P1AA0NNNNN**	2.1	3.1	3.7	0.75	0.75	**20G11FC2P1JA0NNNNN**	2
3.4	5.1	6.1	2	2	**20G11FD3P4AA0NNNNN**	3.5	5.2	6.3	1.5	1.5	**20G11FC3P5JA0NNNNN**	2
5	7.5	9	3	3	**20G11FD5P0AA0NNNNN**	5	7.5	9.0	2.2	2.2	**20G11FC5P0JA0NNNNN**	2
8	12	14.4	5	5	**20G11FD8P0AA0NNNNN**	8.7	13	15.6	4	4	**20G11FC8P7JA0NNNNN**	2
11	16.5	19.8	7.5	7.5	**20G11FD011AA0NNNNN**	11.5	17.2	20.7	5.5	5.5	**20G11FC011JA0NNNNN**	2
14 (11)	15.4 (16.5)	21 (21)	10	7.5	**20G11FD014AA0NNNNN**	15.4 (11.5)	16.9 (17.3)	23.1 (23.1)	7.5	5.5	**20G11FC015JA0NNNNN**	2
22 (14)	24.2 (21)	33 (33)	15	10	**20G11FD022AA0NNNNN**	22 (15.4)	24.2 (23.1)	33 (33)	11	7.5	**20G11FC022JA0NNNNN**	2
27 (22)	29.7 (33)	40.5 (40.5)	20	15	**20G11FD027AA0NNNNN**	30 (22)	33 (33)	45 (45)	15	11	**20G11FC030JA0NNNNN**	3
34 (27)	37.4 (40.5)	51 (51)	25	20	**20G11FD034AA0NNNNN**	37 (30)	40.7 (45)	55.5 (55.5)	18.5	15	**20G11FC037JA0NNNNN**	3
40 (34)	44 (51)	60 (61.2)	30	25	**20G11FD040AA0NNNNN**	43 (37)	47.3 (55.5)	64.5 (66.6)	22	18.5	**20G11FC043JA0NNNNN**	3
52 (40)	57.2 (60)	78 (78)	40	30	**20G11FD052AA0NNNNN**	60 (43)	66 (66)	90 (90)	30	22	**20G11FC060JA0NNNNN**	4
65 (52)	71.5 (78)	97.5 (97.5)	50	40	**20G11FD065AA0NNNNN**	72 (60)	79.2 (90)	108 (108)	37	30	**20G11FC072JA0NNNNN**	4
77 (65)	84.7 (97.5)	116 (117)	60	50	**20G11FD077AA0NNNNN**	85 (72)	93.5 (108)	128 (130)	45	37	**20G11FC085JA0NNNNN**	5
96 (77)	106 (116)	144 (144)	75	60	**20G11FD096AA0NNNNN**	104 (85)	114 (128)	156 (156)	55	45	**20G11FC104JA0NNNNN**	5

Note: Frames 6…7 require an optional user installed flange kit with an IP00, NEMA/UL Type Open drive.

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

§ Some drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

600V AC, Three-Phase Drives ♣

Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Frame Size
Cont.	1 Min.	3 Sec.				
1.7 (0.9)	1.9 (1.4)	2.6 (2.6)	1	0.5	**20G11FE1P7AA0NNNNN**	3
2.7 (1.7)	3.0 (2.6)	4.1 (4.6)	2	1	**20G11FE2P7AA0NNNNN**	3
3.9 (2.7)	4.3 (4.1)	5.9 (7.3)	3	2	**20G11FE3P9AA0NNNNN**	3
6.1 (3.9)	6.7 (5.9)	9.2 (10.5)	5	3	**20G11FE6P1AA0NNNNN**	3
9 (6.1)	9.9 (9.2)	13.5 (16.5)	7.5	5	**20G11FE9P0AA0NNNNN**	3
11 (9)	12.1 (13.5)	16.5 (24.3)	10	7.5	**20G11FE011AA0NNNNN**	3
17 (11)	18.7 (16.5)	25.5 (29.7)	15	10	**20G11FE017AA0NNNNN**	3
22 (17)	24 (26)	33 (46)	20	15	**20G11FE022AA0NNNNN**	3
27 (22)	30 (33)	41 (59)	25	20	**20G11FE027AA0NNNNN**	4
32 (27)	35 (41)	48 (73)	30	25	**20G11FE032AA0NNNNN**	4
41 (32)	45 (48)	62 (86)	40	30	**20G11FE041AA0NNNNN**	5
52 (41)	57 (62)	78 (111)	50	40	**20G11FE052AA0NNNNN**	5

§ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

IP54, NEMA/UL Type 12

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						
Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps §			Normal Duty kW	Heavy Duty kW	Cat. No. ★	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
2.1	3.1	3.7	1	1	**20G11GD2P1AA0NNNNN**	2.1	3.1	3.7	0.75	0.75	**20G11GC2P1JA0NNNNN**	2
3.4	5.1	6.1	2	2	**20G11GD3P4AA0NNNNN**	3.5	5.2	6.3	1.5	1.5	**20G11GC3P5JA0NNNNN**	2
5	7.5	9	3	3	**20G11GD5P0AA0NNNNN**	5	7.5	9.0	2.2	2.2	**20G11GC5P0JA0NNNNN**	2
8	12	14.4	5	5	**20G11GD8P0AA0NNNNN**	8.7	13	15.6	4	4	**20G11GC8P7JA0NNNNN**	2
11	16.5	19.8	7.5	7.5	**20G11GD011AA0NNNNN**	11.5	17.2	20.7	5.5	5.5	**20G11GC011JA0NNNNN**	2
14 (11)	15.4 (16.5)	21 (21)	10	7.5	**20G11GD014AA0NNNNN**	15.4 (11.5)	16.9 (17.3)	23.1 (23.1)	7.5	5.5	**20G11GC015JA0NNNNN**	2
22 (14)	24.2 (21)	33 (33)	15	10	**20G11GD022AA0NNNNN**	22 (15.4)	24.2 (23.1)	33 (33)	11	7.5	**20G11GC022JA0NNNNN**	2
27 (22)	29.7 (33)	40.5 (40.5)	20	15	**20G11GD027AA0NNNNN**	30 (22)	33 (33)	45 (45)	15	11	**20G11GC030JA0NNNNN**	3
34 (27)	37.4 (40.5)	51 (51)	25	20	**20G11GD034AA0NNNNN**	37 (30)	40.7 (45)	55.5 (55.5)	18.5	15	**20G11GC037JA0NNNNN**	3
40 (34)	44 (51)	60 (61.2)	30	25	**20G11GD040AA0NNNNN**	43 (37)	47.3 (55.5)	64.5 (66.6)	22	18.5	**20G11GC043JA0NNNNN**	3
52 (40)	57.2 (60)	78 (78)	40	30	**20G11GD052AA0NNNNN**	60 (43)	66 (66)	90 (90)	30	22	**20G11GC060JA0NNNNN**	4
65 (52)	71.5 (78)	97.5 (97.5)	50	40	**20G11GD065AA0NNNNN**	72 (60)	79.2 (90)	108 (108)	37	30	**20G11GC072JA0NNNNN**	5
77 (65)	84.7 (97.5)	116 (117)	60	50	**20G11GD077AA0NNNNN**	85 (72)	93.5 (108)	128 (130)	45	37	**20G11GC085JA0NNNNN**	5
96 (77)	106 (116)	144 (144)	75	60	**20G1AGD096AN0NNNNN**	104 (85)	114 (128)	156 (156)	55	45	**20G1AGC104JN0NNNNN**	6 ♠
125 (96)	138 (144)	188 (188)	100	75	**20G1AGD125AN0NNNNN**	140 (104)	154 (156)	210 (210)	75	55	**20G1AGC140JN0NNNNN**	6 ♠
156 (125)	172 (188)	234 (234)	125	100	**20G1AGD156AN0NNNNN**	170 (140)	187 (210)	255 (255)	90	75	**20G1AGC170JN0NNNNN**	6 ♠
186 (156)	205 (234)	279 (281)	150	125	**20G1AGD186AN0NNNNN**	205 (170)	226 (255)	308 (308)	110	90	**20G1AGC205JN0NNNNN**	6 ♠
248 (186)	273 (279)	372 (372)	200	150	**20G1AGD248AN0NNNNN**	260 (205)	286 (308)	390 (390)	132	110	**20G1AGC260JN0NNNNN**	7 ♠
302 (248)	332 (372)	453 (453)	250	200	**20G1AGD302AN0NNNNN**	302 (260)	332 (390)	453 (468)	160	132	**20G1AGC302JN0NNNNN**	7 ♠
361 (302)	397 (453)	542 (544)	300	250	**20G1AGD361AN0NNNNN**	367 (302)	404 (453)	551 (551)	200	160	**20G1AGC367JN0NNNNN**	7 ♠
415 (361)	457 (542)	623 (650)	350	300	**20G1AGD415AN0NNNNN**	456 (367)	502 (551)	684 (684)	250	200	**20G1AGC456JN0NNNNN**	7 ♠

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

♠ Also available with internal Brake IGBT (20G1xxxxxxx **A** xxxxxx).

§ Some drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

Frames 3, 4 and 5 are 600V only drives. Frames 6 and 7 are dual voltage drives and can be operated at 600V or 690V AC.
Important: Frames 3, 4, and 5 must NOT be used in common DC input sharing applications with Frame 6 or larger drives. For details, contact your local Rockwell Automation sales office or Allen-Bradley Distributor.

DC Bus terminals are not supplied with AC input Frame 6 and 7 drives.

600V AC, Three-Phase Drives ♣

Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Frame Size
Cont.	1 Min.	3 Sec.				
1.7 (0.9)	1.9 (1.4)	2.6 (2.6)	1	0.5	**20G11GE1P7AA0NNNNN**	3
2.7 (1.7)	3.0 (2.6)	4.1 (4.6)	2	1	**20G11GE2P7AA0NNNNN**	3
3.9 (2.7)	4.3 (4.1)	5.9 (7.3)	3	2	**20G11GE3P9AA0NNNNN**	3
6.1 (3.9)	6.7 (5.9)	9.2 (10.5)	5	3	**20G11GE6P1AA0NNNNN**	3
9 (6.1)	9.9 (9.2)	13.5 (16.5)	7.5	5	**20G11GE9P0AA0NNNNN**	3
11 (9)	12.1 (13.5)	16.5 (24.3)	10	7.5	**20G11GE011AA0NNNNN**	3
17 (11)	18.7 (16.5)	25.5 (29.7)	15	10	**20G11GE017AA0NNNNN**	3
22 (17)	24 (26)	33 (46)	20	15	**20G11GE022AA0NNNNN**	3
27 (22)	30 (33)	41 (59)	25	20	**20G11GE027AA0NNNNN**	4
32 (27)	35 (41)	48 (73)	30	25	**20G11GE032AA0NNNNN**	4
41 (32)	45 (48)	62 (86)	40	30	**20G11GE041AA0NNNNN**	5
52 (41)	57 (62)	78 (111)	50	40	**20G11GE052AA0NNNNN**	5

§ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

600…690V AC, Three-Phase Drives ♣

600V AC Input						690V AC Input						Frame Size
Output Amps §			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps §			Normal Duty kW	Heavy Duty kW	Cat. No. ★	
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
12 (9.1)	13.2 (13.7)	18 (18)	10 ‡	7.5	**20G1AGE012AN0NNNNN**	12 (9)	13.2 (13.5)	18 (18)	7.5	5.5	**20G1AGF012JN0NNNNN**	6
18 (11.1)	19.8 (16.7)	27 (27)	15 ‡	10	**20G1AGE018AN0NNNNN**	15 (11.5)	16.5 (17.3)	22.5 (22.5)	11	7.5	**20G1AGF015JN0NNNNN**	6
23 (18)	25.3 (27)	34.5 (34.5)	20 ‡	15	**20G1AGE023AN0NNNNN**	20 (15)	22 (22.5)	30 (30)	15	11	**20G1AGF020JN0NNNNN**	6
24 (22)	26.4 (33)	36 (39.6)	20 ‡	20	**20G1AGE024AN0NNNNN**	23 (20)	25.3 (30)	34.5 (36)	18.5	15	**20G1AGF023JN0NNNNN**	6
28 (23)	30.8 (34.5)	42 (42)	25 ‡	20	**20G1AGE028AN0NNNNN**	30 (23)	33 (34.5)	45 (45)	22	18.5	**20G1AGF030JN0NNNNN**	6
33 (28)	36.3 (42)	49.5 (50.4)	30 ‡	25	**20G1AGE033AN0NNNNN**	34 (30)	37.4 (45)	51 (54)	30	22	**20G1AGF034JN0NNNNN**	6
42 (33)	46.2 (49.5)	63 (63)	40 ‡	30	**20G1AGE042AN0NNNNN**	46 (34)	50.6 (51)	69 (69)	37	30	**20G1AGF046JN0NNNNN**	6
53 (42)	58.3 (63)	79.5 (79.5)	50 ‡	40	**20G1AGE053AN0NNNNN**	50 (46)	55 (69)	75 (82.8)	45	37	**20G1AGF050JN0NNNNN**	6
63 (52)	69.3 (78)	94.5 (94.5)	60	50	**20G1AGE063AN0NNNNN**	61 (50)	67.1 (75)	91.5 (91.5)	55	45	**20G1AGF061JN0NNNNN**	6
77 (63)	84.7 (94.5)	116 (116)	75	60	**20G1AGE077AN0NNNNN**	82 (61)	90.2 (91.5)	123 (123)	75	55	**20G1AGF082JN0NNNNN**	6
99 (77)	109 (116)	149 (149)	100	75	**20G1AGE099AN0NNNNN**	98 (82)	108 (123)	147 (148)	90	75	**20G1AGF098JN0NNNNN**	6
125 (99)	138 (149)	188 (188)	125	100	**20G1AGE125AN0NNNNN**	119 (98)	131 (147)	179 (179)	110	90	**20G1AGF119JN0NNNNN**	6
144 (125)	158 (188)	216 (225)	150	125	**20G1AGE144AN0NNNNN**	142 (119)	156 (179)	213 (214)	132	110	**20G1AGF142JN0NNNNN**	6
192 (144)	211 (216)	288 (288)	200	150	**20G1AGE192AN0NNNNN**	171 (142)	188 (213)	257 (257)	160	132	**20G1AGF171JN0NNNNN**	7
242 (192)	266 (288)	363 (363)	250	200	**20G1AGE242AN0NNNNN**	212 (171)	233 (257)	318 (318)	200	160	**20G1AGF212JN0NNNNN**	7
289 (242)	318 (318)	434 (436)	300	250	**20G1AGE289AN0NNNNN**	263 (212)	289 (289)	395 (395)	250	200	**20G1AGF263JN0NNNNN**	7

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.
‡ Alternate 600V ratings when connected to drives 60 Hp and greater in common DC input applications with uncontrolled front ends (such as AFE).
§ These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

200 kW / 250 Hp to 1400 kW / 2000 Hp – Frames 8…10

IP20, NEMA/UL Type 1 Drive (2500 MCC Style Cabinet)

includes:
- DC link choke
- Integrated AC line fuses
- Roll-out design

Important: A Roll-out Cart is required for installation.

IP20, NEMA/UL Type 1 Drive and Options (2500 MCC Style Cabinet)

includes:
- DC link choke
- Integrated AC line fuses
- Roll-out design
- Option bay for control/protection devices

Important: A Roll-out Cart is required for installation.

Roll-out Cart

- Required for Frame 8…10 drives
- Adjustable Curb Height: 0…182 mm (0…7.2 in.)
- Adjustment for Curb Offset/Reach: 0…114 mm (0…4.5 in.)
- For ordering information, see page 124

2500 MCC Style Cabinets

Drives listed on the following pages utilize a CENTERLINE® 2500 MCC style cabinet. This term refers to the type of cabinet and does not imply that the MCC bus is included. To add an MCC bus, refer to pages 98…99 and choose option P20, P22 or P24.

Power Wiring Options (Frame 8 Only)

Cable Option	Wire Entry/Exit Location	IP20, NEMA/UL Type 1 Drive (2500 MCC Style Cabinet)		IP20, NEMA/UL Type 1 Drive and Options (2500 MCC Style Cabinet)	
		600 mm (23.6 in.) Deep Drive Bay	800 mm (31.5 in.) Deep Drive Bay	600 mm Deep Drive Bay w/600 mm Wide Wiring Only Bay	600 or 800 mm Deep Drive Bay w/600 mm Options Bay
Armored Cable with Conduit Hubs	Top Entry, Bottom Exit		✓	✓	✓
	Bottom Entry, Bottom Exit		✓	✓	
	Top Entry, Top Exit		✓	✓	
Shielded Cable with Conduit Hubs	Top Entry, Bottom Exit	✓	✓	✓	✓
	Bottom Entry, Bottom Exit		✓	✓	
	Top Entry, Top Exit		✓	✓	✓ Δ
Shielded Cable without Conduit Hubs ♦	Bottom Entry, Bottom Exit	✓	✓	✓	

Δ This wiring configuration is possible when there are no ouput options in the option bay and the motor connections are wired from the drive bay.

♦ Other configurations with shielded cable are possible, however the use of conduit hubs is recommended.

Refer to the PowerFlex 750-Series Technical Data, publication 750-TD001 for updated power wiring options information.

IP20, NEMA/UL Type 1 (2500 MCC Style Cabinet)

380…400V AC, Three-Phase and 540V DC Input Drives ∇

Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cat. No. ★ §	Frame Size
540	594	NA	315	460	506	693	250	385	578	693	200	**20G1A‡C460JN0NNNNN**	8
585	644		315	540	594	821	315	456	684	821	250	**20G1A‡C540JN0NNNNN**	8
612	673		355	567	624	851	315	472	708	851	250	**20G1A‡C567JN0NNNNN**	8
750	825		400	650	715	975	355	540	810	975	315	**20G1A‡C650JN0NNNNN**	8
796	876		450	750	825	1125	400	585	878	1125	315	**20G1A‡C750JN0NNNNN**	8
832	915		450	770	847	1155	400	642	963	1155	355	**20G1A‡C770JN0NNNNN**	8
1040	1144		560	910	1001	1365	500	750	1125	1365	400	**20G11‡C910JN0NNNNN**	9
1090	1199		630	1040	1144	1584	560	880	1320	1584	500	**20G11‡C1K0JN0NNNNN**	9
1175	1293		710	1090	1199	1638	630	910	1365	1638	500	**20G11‡C1K1JN0NNNNN**	9
1465	1612		800	1175	1293	1872	710	1040	1560	1872	560	**20G11‡C1K2JN0NNNNN**	9
1480	1628		850	1465	1612	2198	800	1090	1635	2198	630	**20G11‡C1K4JN0NNNNN**	9
1600	1760		900	1480	1628	2220	850	1175	1763	2220	710	**20G11‡C1K5JN0NNNNN**	9
1715	1887		1000	1590	1749	2385	900	1325	1988	2385	710	**20G11‡C1K6JN0NNNNN**	10
2330	2563		1400	2150	2365	3225	1250	1800	2700	3225	1000	**20G11‡C2K1JN0NNNNN**	10

§ The 5th character determines Input Type. "1" = AC & DC input w/precharge. "4" = DC input w/precharge. "A" = AC input w/precharge & no DC terminals.

‡ The 6th character determines Enclosure Type & Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. Refer to the Power Wiring Options table.

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

480V AC, Three-Phase and 650V DC Input Drives ∇

Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cat. No. §	Frame Size
485	534	NA	400	430	473	666	350	370	555	666	300	**20G1A‡D430AN0NNNNN**	8
545	600		450	485	534	745	400	414	621	745	350	**20G1A‡D485AN0NNNNN**	8
590	649		500	545	600	818	450	454	681	818	350	**20G1A‡D545AN0NNNNN**	8
710	781		600	617	679	926	500	485	728	926	400	**20G1A‡D617AN0NNNNN**	8
765	842		650	710	781	1065	600	545	818	1065	450	**20G1A‡D710AN0NNNNN**	8
800	880		700	740	817	1110	650	617	926	1110	500	**20G1A‡D740AN0NNNNN**	8
960	1056		800	800	880	1278	700	710	1065	1278	600	**20G11‡D800AN0NNNNN**	9
1045	1150		900	960	1056	1440	800	795	1193	1440	700	**20G11‡D960AN0NNNNN**	9
1135	1249		1000	1045	1150	1568	900	800	1200	1568	750	**20G11‡D1K0AN0NNNNN**	9
1365	1502		1100	1135	1249	1728	1000	960	1440	1728	800	**20G11‡D1K2AN0NNNNN**	9
1420	1562		1250	1365	1502	2048	1100	1045	1568	2048	900	**20G11‡D1K3AN0NNNNN**	9
1540	1694		1350	1420	1562	2130	1250	1135	1703	2130	1000	**20G11‡D1K4AN0NNNNN**	9
1655	1821		1500	1525	1678	2288	1350	1270	1905	2288	1100	**20G11‡D1K5JN0NNNNN**	10
2240	2464		2000	2070	2277	3105	1750	1730	2595	3105	1650	**20G11‡D2K0JN0NNNNN**	10

§ The 5th character determines Input Type. "1" = AC & DC input w/precharge. "4" = DC input w/precharge. "A" = AC input w/precharge & no DC terminals.

‡ The 6th character determines Enclosure Type & Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. Refer to the Power Wiring Options table.

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

600V AC, Three-Phase and 810V DC Input Drives ∇

Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cat. No. §	Frame Size
355	391	NA	350	295	325	490	300	272	408	490	250	**20G1A‡E295AN0NNNNN**	8
395	435		400	355	391	533	350	295	443	533	300	**20G1A‡E355AN0NNNNN**	8
435	479		450	395	435	593	400	329	494	593	350	**20G1A‡E395AN0NNNNN**	8
460	506		500	435	479	639	450	355	533	639	350	**20G1A‡E435AN0NNNNN**	8
510	561		500	460	506	711	500	395	593	711	400	**20G1A‡E460AN0NNNNN**	8
545	600		550	510	561	765	500	425	638	765	450	**20G1A‡E510AN0NNNNN**	8
690	759		700	595	655	918	600	510	765	918	500	**20G11‡E595AN0NNNNN**	9
760	836		800	630	693	1071	700	595	893	1071	600	**20G11‡E630AN0NNNNN**	9
835	919		900	760	836	1140	800	630	945	1140	700	**20G11‡E760AN0NNNNN**	9
900	990		950	825	908	1260	900	700	1050	1260	750	**20G11‡E825AN0NNNNN**	9
980	1078		1000	900	990	1368	950	760	1140	1368	800	**20G11‡E900AN0NNNNN**	9
1045	1150		1100	980	1078	1470	1000	815	1223	1470	900	**20G11‡E980AN0NNNNN**	9
1220	1342		1200	1110	1221	1665	1100	920	1380	1665	1000	**20G11‡E1K1AN0NNNNN**	10
1530	1683		1500	1430	1573	2145	1400	1190	1785	2145	1250	**20G11‡E1K4AN0NNNNN**	10

§ The 5th character determines Input Type. "1" = AC & DC input w/precharge. "4" = DC input w/precharge. "A" = AC input w/precharge & no DC terminals.

‡ The 6th character determines Enclosure Type & Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. Refer to the Power Wiring Options table.

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

690V AC, Three-Phase and 932V DC Input Drives ∇

Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cat. No. § ★	Frame Size
330	363	NA	315	265	292	375	250	215	323	375	200	**20G1A‡F265AN0NNNNN**	8
370	407		355	330	363	473	315	265	398	473	250	**20G1A‡F330AN0NNNNN**	8
410	451		400	370	407	555	355	308	462	555	300	**20G1A‡F370AN0NNNNN**	8
460	506		450	415	457	639	400	370	555	639	355	**20G1A‡F415AN0NNNNN**	8
500	550		500	460	506	675	450	375	563	675	375	**20G1A‡F460AN0NNNNN**	8
530	583		530	500	550	750	500	413	620	750	400	**20G1A‡F500AN0NNNNN**	8
650	715		630	590	649	885	560	460	690	885	450	**20G11‡F590AN0NNNNN**	9
710	781		710	650	715	975	630	500	750	975	500	**20G11‡F650AN0NNNNN**	9
790	869		800	710	781	1065	710	590	885	1065	560	**20G11‡F710AN0NNNNN**	9
860	946		850	765	842	1170	750	650	975	1170	630	**20G11‡F765AN0NNNNN**	9
960	1056		900	795	875	1350	800	750	1125	1350	710	**20G11‡F795AN0NNNNN**	9
1020	1122		1000	960	1056	1440	900	795	1193	1440	800	**20G11‡F960AN0NNNNN**	9
1150	1265		1100	1040	1144	1560	1000	865	1298	1560	900	**20G11‡F1K0AN0NNNNN**	10
1485	1634		1500	1400	1540	2100	1400	1160	1740	2100	1120	**20G11‡F1K4AN0NNNNN**	10

§ The 5th character determines Input Type. "1" = AC & DC input w/precharge. "4" = DC input w/precharge. "A" = AC input w/precharge & no DC terminals.

‡ The 6th character determines Enclosure Type & Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. Refer to the Power Wiring Options table.

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

IP54, NEMA Type 12 (2500 MCC Style Cabinet)

380…400V AC, Three-Phase and 540V DC Input Drives ∇

Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cat. No. ★	Frame Size
540	594	NA	315	460	506	693	250	385	578	693	200	**20G1AJC460AN0NNNNN**	8
585	644		315	540	594	821	315	456	684	821	250	**20G1AJC540AN0NNNNN**	8
612	673		355	567	624	851	315	472	708	851	250	**20G1AJC567AN0NNNNN**	8
750	825		400	650	715	975	355	540	810	975	315	**20G1AJC650AN0NNNNN**	8
796	876		450	750	825	1125	400	585	878	1125	315	**20G1AJC750AN0NNNNN**	8
832	915		450	770	847	1155	400	642	963	1155	355	**20G1AJC770AN0NNNNN**	8
1040	1144		560	910	1001	1365	500	750	1125	1365	400	**20G11JC910AN0NNNNN**	9
1090	1199		630	1040	1144	1584	560	880	1320	1584	500	**20G11JC1K0AN0NNNNN**	9
1175	1293		710	1090	1199	1638	630	910	1365	1638	500	**20G11JC1K1AN0NNNNN**	9
1465	1612		800	1175	1293	1872	710	1040	1560	1872	560	**20G11JC1K2AN0NNNNN**	9
1480	1628		850	1465	1612	2198	800	1090	1635	2198	630	**20G11JC1K4AN0NNNNN**	9
1600	1760		900	1480	1628	2220	850	1175	1763	2220	710	**20G11JC1K5AN0NNNNN**	9
1715	1887		1000	1590	1749	2385	900	1325	1988	2385	710	**20G11JC1K6AN0NNNNN**	10
2330	2563		1400	2150	2365	3225	1250	1800	2700	3225	1000	**20G11JC2K1AN0NNNNN**	10

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.
∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

480V AC, Three-Phase and 650V DC Input Drives ∇

Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cat. No.	Frame Size
485	534	NA	400	430	473	666	350	370	555	666	300	**20G1AJD430AN0NNNNN**	8
545	600		450	485	534	745	400	414	621	745	350	**20G1AJD485AN0NNNNN**	8
590	649		500	545	600	818	450	454	681	818	350	**20G1AJD545AN0NNNNN**	8
710	781		600	617	679	926	500	485	728	926	400	**20G1AJD617AN0NNNNN**	8
765	842		650	710	781	1065	600	545	818	1065	450	**20G1AJD710AN0NNNNN**	8
800	880		700	740	817	1110	650	617	926	1110	500	**20G1AJD740AN0NNNNN**	8
960	1056		800	800	880	1278	700	710	1065	1278	600	**20G11JD800AN0NNNNN**	9
1045	1150		900	960	1056	1440	800	795	1193	1440	700	**20G11JD960AN0NNNNN**	9
1135	1249		1000	1045	1150	1568	900	800	1200	1568	750	**20G11JD1K0AN0NNNNN**	9
1365	1502		1100	1135	1249	1728	1000	960	1440	1728	800	**20G11JD1K2AN0NNNNN**	9
1420	1562		1250	1365	1502	2048	1100	1045	1568	2048	900	**20G11JD1K3AN0NNNNN**	9
1540	1694		1350	1420	1562	2130	1250	1135	1703	2130	1000	**20G11JD1K4AN0NNNNN**	9
1655	1821		1500	1525	1678	2288	1350	1270	1905	2288	1100	**20G11JD1K5AN0NNNNN**	10
2240	2464		2000	2070	2277	3105	1750	1730	2595	3105	1650	**20G11JD2K0AN0NNNNN**	10

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

600V AC, Three-Phase and 810V DC Input Drives ∇

Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cat. No.	Frame Size
355	391	NA	350	295	325	490	300	272	408	490	250	**20G1AJE295AN0NNNNN**	8
395	435		400	355	391	533	350	295	443	533	300	**20G1AJE355AN0NNNNN**	8
435	479		450	395	435	593	400	329	494	593	350	**20G1AJE395AN0NNNNN**	8
460	506		500	435	479	639	450	355	533	639	350	**20G1AJE435AN0NNNNN**	8
510	561		500	460	506	711	500	395	593	711	400	**20G1AJE460AN0NNNNN**	8
545	600		550	510	561	765	500	425	638	765	450	**20G1AJE510AN0NNNNN**	8
690	759		700	595	655	918	600	510	765	918	500	**20G11JE595AN0NNNNN**	9
760	836		800	630	693	1071	700	595	893	1071	600	**20G11JE630AN0NNNNN**	9
835	919		900	760	836	1140	800	630	945	1140	700	**20G11JE760AN0NNNNN**	9
900	990		950	825	908	1260	900	700	1050	1260	750	**20G11JE825AN0NNNNN**	9
980	1078		1000	900	990	1368	950	760	1140	1368	800	**20G11JE900AN0NNNNN**	9
1045	1150		1100	980	1078	1470	1000	815	1223	1470	900	**20G11JE980AN0NNNNN**	9
1220	1342		1200	1110	1221	1665	1100	920	1380	1665	1000	**20G11JE1K1AN0NNNNN**	10
1530	1683		1500	1430	1573	2145	1400	1190	1785	2145	1250	**20G11JE1K4AN0NNNNN**	10

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

690V AC, Three-Phase and 932V DC Input Drives ∇

Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cat. No. ★	Frame Size
330	363	NA	315	265	292	375	250	215	323	375	200	**20G1AJF265AN0NNNNN**	8
370	407		355	330	363	473	315	265	398	473	250	**20G1AJF330AN0NNNNN**	8
410	451		400	370	407	555	355	308	462	555	300	**20G1AJF370AN0NNNNN**	8
460	506		450	415	457	639	400	370	555	639	355	**20G1AJF415AN0NNNNN**	8
500	550		500	460	506	675	450	375	563	675	375	**20G1AJF460AN0NNNNN**	8
530	583		530	500	550	750	500	413	620	750	400	**20G1AJF500AN0NNNNN**	8
650	715		630	590	649	885	560	460	690	885	450	**20G11JF590AN0NNNNN**	9
710	781		710	650	715	975	630	500	750	975	500	**20G11JF650AN0NNNNN**	9
790	869		800	710	781	1065	710	590	885	1065	560	**20G11JF710AN0NNNNN**	9
860	946		850	765	842	1170	750	650	975	1170	630	**20G11JF765AN0NNNNN**	9
960	1056		900	795	875	1350	800	750	1125	1350	710	**20G11JF795AN0NNNNN**	9
1020	1122		1000	960	1056	1440	900	795	1193	1440	800	**20G11JF960AN0NNNNN**	9
1150	1265		1100	1040	1144	1560	1000	865	1298	1560	900	**20G11JF1K0AN0NNNNN**	10
1485	1634		1500	1400	1540	2100	1400	1160	1740	2100	1120	**20G11JF1K4AN0NNNNN**	10

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.
∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

IP00, NEMA Type Open Drive

To order an IP00 drive:

1. Using the tables that follow, locate your desired drive output values.
2. Select the Base Drive Catalog Number for your desired output values.
3. Note the Quantity Required.
4. Order the specified quantity (1, 2, or 3) of the Base Drive Catalog Number.
5. Refer to the page 110 for option kits and the PowerFlex 755 IP00 NEMA/UL Open Type Drive Installation Instructions, publication 750-IN020 for installation details.

380…400V AC, Three-Phase and 540V DC Input Drives ∇

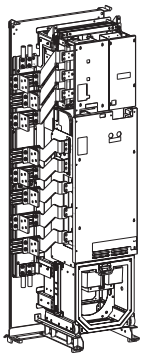
Light Duty		Normal Duty		Heavy Duty				
Output Amps Cont.	kW	Output Amps Cont.	kW	Output Amps Cont.	kW	Base Drive Cat. No. ★	Quantity Required	Equivalent Frame Size
540	315	460	250	385	200	**20G11TC460AN0NNNNN**	1	8
585	315	540	315	456	250	**20G11TC540AN0NNNNN**	1	8
612	355	567	315	472	250	**20G11TC567AN0NNNNN**	1	8
750	400	650	355	540	315	**20G11TC650AN0NNNNN**	1	8
796	450	750	400	585	315	**20G11TC750AN0NNNNN**	1	8
832	450	770	400	642	355	**20G11TC770AN0NNNNN**	1	8
1040	560	910	500	750	400	**20G11TC460AN0NNNNN**	2	9
1090	630	1040	560	880	500	**20G11TC540AN0NNNNN**	2	9
1175	710	1090	630	910	500	**20G11TC567AN0NNNNN**	2	9
1465	800	1175	710	1040	560	**20G11TC650AN0NNNNN**	2	9
1480	850	1465	800	1090	630	**20G11TC750AN0NNNNN**	2	9
1600	900	1480	850	1175	710	**20G11TC770AN0NNNNN**	2	9
1715	1000	1590	900	1325	710	**20G11TC567AN0NNNNN**	3	10
2330	1400	2150	1250	1800	1000	**20G11TC770AN0NNNNN**	3	10

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.
∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

480V AC, Three-Phase and 650V DC Input Drives ∇

Light Duty (-LD)		Normal Duty (-ND)		Heavy Duty (-HD)				
Output Amps Cont.	Hp	Output Amps Cont.	Hp	Output Amps Cont.	Hp	Base Drive Cat. No.	Quantity Required	Equivalent Frame Size
485	400	430	350	370	300	**20G11TD430AN0NNNNN**	1	8
545	450	485	400	414	350	**20G11TD485AN0NNNNN**	1	8
590	500	545	450	454	350	**20G11TD545AN0NNNNN**	1	8
710	600	617	500	485	400	**20G11TD617AN0NNNNN**	1	8
765	650	710	600	545	450	**20G11TD710AN0NNNNN**	1	8
800	700	740	650	617	500	**20G11TD740AN0NNNNN**	1	8
960	800	800	700	710	600	**20G11TD430AN0NNNNN**	2	9
1045	900	960	800	795	700	**20G11TD485AN0NNNNN**	2	9
1135	1000	1045	900	800	750	**20G11TD545AN0NNNNN**	2	9
1365	1100	1135	1000	960	800	**20G11TD617AN0NNNNN**	2	9
1420	1250	1365	1100	1045	900	**20G11TD710AN0NNNNN**	2	9
1540	1350	1420	1250	1135	1000	**20G11TD740AN0NNNNN**	2	9
1655	1500	1525	1350	1270	1100	**20G11TD545AN0NNNNN**	3	10
2240	2000	2070	1750	1730	1650	**20G11TD740AN0NNNNN**	3	10

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.



600V AC, Three-Phase and 810V DC Input Drives ∇

Light Duty (-LD)		Normal Duty (-ND)		Heavy Duty (-HD)				
Output Amps Cont.	Hp	Output Amps Cont.	Hp	Output Amps Cont.	Hp	Base Drive Cat. No.	Quantity Required	Equivalent Frame Size
355	350	295	300	272	250	**20G11TE295AN0NNNNN**	1	8
395	400	355	350	295	300	**20G11TE355AN0NNNNN**	1	8
435	450	395	400	329	350	**20G11TE395AN0NNNNN**	1	8
460	500	435	450	355	350	**20G11TE435AN0NNNNN**	1	8
510	500	460	500	395	400	**20G11TE460AN0NNNNN**	1	8
545	550	510	500	425	450	**20G11TE510AN0NNNNN**	1	8
690	700	595	600	510	500	**20G11TE295AN0NNNNN**	2	9
760	800	630	700	595	600	**20G11TE355AN0NNNNN**	2	9
835	900	760	800	630	700	**20G11TE395AN0NNNNN**	2	9
900	950	825	900	700	750	**20G11TE435AN0NNNNN**	2	9
980	1000	900	950	760	800	**20G11TE460AN0NNNNN**	2	9
1045	1100	980	1000	815	900	**20G11TE510AN0NNNNN**	2	9
1220	1200	1110	1100	920	1000	**20G11TE395AN0NNNNN**	3	10
1530	1500	1430	1400	1190	1250	**20G11TE510AN0NNNNN**	3	10

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

690V AC, Three-Phase and 932V DC Input Drives ∇

Light Duty (-LD)		Normal Duty (-ND)		Heavy Duty (-HD)				
Output Amps Cont.	kW	Output Amps Cont.	kW	Output Amps Cont.	kW	Base Drive Cat. No. ★	Quantity Required	Equivalent Frame Size
330	315	265	250	215	200	**20G11TF265AN0NNNNN**	1	8
370	355	330	315	265	250	**20G11TF330AN0NNNNN**	1	8
410	400	370	355	308	300	**20G11TF370AN0NNNNN**	1	8
460	450	415	400	370	355	**20G11TF415AN0NNNNN**	1	8
500	500	460	450	375	375	**20G11TF460AN0NNNNN**	1	8
530	530	500	500	413	400	**20G11TF500AN0NNNNN**	1	8
650	630	590	560	460	450	**20G11TF265AN0NNNNN**	2	9
710	710	650	630	500	500	**20G11TF330AN0NNNNN**	2	9
790	800	710	710	590	560	**20G11TF370AN0NNNNN**	2	9
860	850	765	750	650	630	**20G11TF415AN0NNNNN**	2	9
960	900	795	800	750	710	**20G11TF460AN0NNNNN**	2	9
1020	1000	960	900	795	800	**20G11TF500AN0NNNNN**	2	9
1150	1100	1040	1000	865	900	**20G11TF370AN0NNNNN**	3	10
1485	1500	1400	1400	1160	1120	**20G11TF500AN0NNNNN**	3	10

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.
∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

IP00, NEMA Type Open Drive (continued)

PowerFlex 755 IP00 Option Kits

Description	Required?	Frame 8		Frame 9		Frame 10	
		Cat. No.	Qty.	Cat. No.	Qty.	Cat. No.	Qty.
Field Termination, Converter, AC Input	Recommended	**20-750-BUS2-F8**	1	**20-750-BUS2-F9**	1	**20-750-BUS2-F10**	1
Field Termination, Inverter, AC Output	Recommended	**20-750-BUS3-F8**	1	**20-750-BUS3-F9**	1	**20-750-BUS3-F10**	1
Field Termination, Inverter, DC Bus	Recommended	**20-750-BUS4-F8**	1	**20-750-BUS4-F9**	1	**20-750-BUS4-F10**	1
Field Termination, DC Input, Common Bus Precharge § ♠	Recommended	**20-750-BUS5-F8**	1	**20-750-BUS5-F9**	1	**20-750-BUS5-F10**	1
POD, Bucket Assembly	Required	**20-750-POD1-F8**	1	**20-750-POD1-F8**	1	**20-750-POD1-F8**	1
POD, Cable, 24 Volt Supply ♦	Required	**20-750-PH1-F8**	Δ	**20-750-PH2-F9**	1	**20-750-PH3-F10**	1
Cable, Fiber Optic, 560 mm (22 in.) ♦	Required	**20-750-FCBL1-F8**	1	**-**	-	**-**	-
Cable, Fiber Optic, 2.8 m (110 in.) ♦	Required	**-**	-	**20-750-FCBL1-F10**	2	**20-750-FCBL1-F10**	3
POD, Remote Mounting Kit	Optional	**20-750-RPD1-F8**	1	**20-750-RPD1-F9**	1	**20-750-RPD1-F10**	1
Mounting Kit, Back Panel	Recommended	**20-750-MNT2-F8**	1	**20-750-MNT2-F9**	1	**20-750-MNT2-F10**	1
Mounting Kit, Floor	Recommended	**20-750-MNT3-F8**	1	**20-750-MNT3-F9**	1	**20-750-MNT3-F10**	1
Duct, Top Outlet	Recommended	**20-750-DUCT2-F8**	1	**20-750-DUCT2-F8**	2	**20-750-DUCT2-F8**	3
Duct, Bottom Inlet	Recommended	**20-750-DUCT4-F8**	1	**20-750-DUCT4-F8**	2	**20-750-DUCT4-F8**	3
Roll-Out Cart	Recommended	**20-750-CART1-F8**	1	**20-750-CART1-F8**	1	**20-750-CART1-F8**	1
Control Power Circuit Breaker §	Recommended	**1489-A2D130**	1	**1489-A2D130**	2	**1489-A2D130**	3
Control Power Circuit Breaker Lock §	Recommended	**1489-AAL0A**	1	**1489-AAL0A**	2	**1489-AAL0A**	3
EMC Core, Converter Input, AC Input	Optional	**20-750-EMCBUS1-F8**	1	**20-750-EMCBUS1-F9**	1	**20-750-EMCBUS1-F10**	1
EMC Core, Inverter Output	Optional	**20-750-EMCCM1-F8**	1	**20-750-EMCCM1-F8**	2	**20-750-EMCCM1-F8**	3

§ Common DC input drives only.

♠ EMC cores are included with the 20-750-BUS5-Fx kits.

Δ 24 volt supply cable is included with each Frame 8 drive unit.

♦ 20-750-PH1-Fx and 20-750-FBCL1-Fx kits are used if the Control Pod is mounted in the drive. If the Control Pod is to be remote mounted (up to 23 m or 75 ft away), order a 20-750-RPD1-Fx kit instead.

Cabinet Options

For proper alignment and installation of a 2100 Transition Section, the MCC must be equipped with a 1.5 inch mounting channel.

PowerFlex 755 2100 Transition Section ∇

Description	Cat. No.	Frame
Left Mount Transition Section, 20 inch Depth, Cabinet, Gray with removable 1.5 in. Mounting Channel	**20-750-XSEC-LB-20G**	8…10
Right Mount Transition Section, 20 inch Depth, Cabinet, Gray with removable 1.5 in. Mounting Channel	**20-750-XSEC-RB-20G**	8…10
Right or Left Mount Transition Section, 15 inch Depth, Cabinet, Gray with removable 1.5 in. Mounting Channel	**20-750-XSEC-BB-15G**	8…10
Left Mount, Bus Bar Splice Kit, Bumped Back, 1200 A with 1.5 in. Mounting Channel ★	**20-750-XBUS-LHBB-1200**	8…10
Left Mount, Bus Bar Splice Kit, Bumped Back, 2000 A with 1.5 in. Mounting Channel ★	**20-750-XBUS-LHBB-2000**	8…10
Left Mount, Bus Bar Splice Kit, Bumped Back, 3000 A with 1.5 in. Mounting Channel ★	**20-750-XBUS-LHBB-3000**	8…10
Left Mount, Bus Bar Splice Kit, Non-Bumped Back, 1200 A with 1.5 in. Mounting Channel ★	**20-750-XBUS-LHNB-1200**	8…10
Left Mount, Bus Bar Splice Kit, Non-Bumped Back, 2000 A with 1.5 in. Mounting Channel ★	**20-750-XBUS-LHNB-2000**	8…10
Left Mount, Bus Bar Splice Kit, Non-Bumped Back, 3000 A with 1.5 in. Mounting Channel ★	**20-750-XBUS-LHNB-3000**	8…10
Right Mount, Bus Bar Splice Kit, Bumped Back, 1200 A with 1.5 in. Mounting Channel ‡	**20-750-XBUS-RHBB-1200**	8…10
Right Mount, Bus Bar Splice Kit, Bumped Back, 2000 A with 1.5 in. Mounting Channel ‡	**20-750-XBUS-RHBB-2000**	8…10
Right Mount, Bus Bar Splice Kit, Bumped Back, 3000 A with 1.5 in. Mounting Channel ‡	**20-750-XBUS-RHBB-3000**	8…10
Right Mount, Bus Bar Splice Kit, Non-Bumped Back, 1200 A with 1.5 in. Mounting Channel ‡	**20-750-XBUS-RHNB-1200**	8…10
Right Mount, Bus Bar Splice Kit, Non-Bumped Back, 2000 A with 1.5 in. Mounting Channel ‡	**20-750-XBUS-RHNB-2000**	8…10
Right Mount, Bus Bar Splice Kit, Non-Bumped Back, 3000 A with 1.5 in. Mounting Channel ‡	**20-750-XBUS-RHNB-3000**	8…10
Left Mount, Bus Bar Splice Kit, Bumped Back, 1200 A without Mounting Channel ★	**20-750-XBUS-LLBB-1200**	8…10
Left Mount, Bus Bar Splice Kit, Bumped Back, 2000 A without Mounting Channel ★	**20-750-XBUS-LLBB-2000**	8…10
Left Mount, Bus Bar Splice Kit, Bumped Back, 3000 A without Mounting Channel ★	**20-750-XBUS-LLBB-3000**	8…10
Left Mount, Bus Bar Splice Kit, Non-Bumped Back, 1200 A without Mounting Channel ★	**20-750-XBUS-LLNB-1200**	8…10
Left Mount, Bus Bar Splice Kit, Non-Bumped Back, 2000 A without Mounting Channel ★	**20-750-XBUS-LLNB-2000**	8…10
Left Mount, Bus Bar Splice Kit, Non-Bumped Back, 3000 A without Mounting Channel ★	**20-750-XBUS-LLNB-3000**	8…10
Right Mount, Bus Bar Splice Kit, Bumped Back, 1200 A without Mounting Channel ‡	**20-750-XBUS-RLBB-1200**	8…10
Right Mount, Bus Bar Splice Kit, Bumped Back, 2000 A without Mounting Channel ‡	**20-750-XBUS-RLBB-2000**	8…10
Right Mount, Bus Bar Splice Kit, Bumped Back, 3000 A without Mounting Channel ‡	**20-750-XBUS-RLBB-3000**	8…10
Right Mount, Bus Bar Splice Kit, Non-Bumped Back, 1200 A without Mounting Channel ‡	**20-750-XBUS-RLNB-1200**	8…10
Right Mount, Bus Bar Splice Kit, Non-Bumped Back, 2000 A without Mounting Channel ‡	**20-750-XBUS-RLNB-2000**	8…10
Right Mount, Bus Bar Splice Kit, Non-Bumped Back, 3000 A without Mounting Channel ‡	**20-750-XBUS-RLNB-3000**	8…10

★ Left side of drive to right side of 2100 MCC.
‡ Right side of drive to left side of 2100 MCC.
∇ Requires the appropriate drive option P20, P22 or P24, which is dependent on the back bus ampacity.

PowerFlex 755 Empty Option Bay ♣

Description	Cat. No.	Frame
Option bay, 600 mm wide by 600 mm deep, Beige	**20-750-PBAY-66**	8…10
Option bay, 800 mm wide by 600 mm deep, Beige	**20-750-PBAY-86**	8…10
Option bay, 1200 mm wide by 600 mm deep, Beige	**20-750-PBAY-126**	8…10
Option bay, 600 mm wide by 800 mm deep, Beige	**20-750-PBAY-68**	8…10
Option bay, 800 mm wide by 800 mm deep, Beige	**20-750-PBAY-88**	8…10
Option bay, 1200 mm wide by 800 mm deep, Beige	**20-750-PBAY-128**	8…10
Empty Bay, RH Bus Bar, 1235 A Maximum	**20-750-PBAY-RHBB-1235**	8…10
Empty Bay, RH Bus Bar, 1625 A Maximum	**20-750-PBAY-RHBB-1625**	8…10
Empty Bay, RH Bus Bar, 2437 A Maximum	**20-750-PBAY-RHBB-2437**	8…10
Right Mount Bus Bar, Cable Connection, 2-Hole	**20-750-LBRKT-2**	8…10
Right Mount Bus Bar, Cable Connection, 4-Hole	**20-750-LBRKT-4**	8…10
Right Mount Bus Bar, Installation Kit, 3-Phase Connection	**20-750-INS-3**	8…10
Right Mount Bus Bar, Installation Kit, DC Connection	**20-750-INS-2**	8…10
Rear Drive Bus Bar, Cable Connection	**20-750-RBRKT-4**	8…10

♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

Drive Options - AC Input (2500 MCC Style Cabinet)

To configure a catalog number for a drive with options:

1. Select the base drive catalog number from the tables that follow.
2. Select the System Overload Duty Cycle and Power Disconnect options from the Required Options table. Add the desired option codes to the end of the base catalog number, separating each option code with a dash. For example: 21G1AxC460JN0NNNNN**-LD-P3**.
3. Select other options from the Additional Options table. Add the option code(s) to the end of the catalog number separating each code with a dash. For example: 21G1AxC460JN0NNNNN**-LD-P3-P11**.

Required Options ‡

Type	Option		Applicable Frame	Description
System Overload Duty Cycle Δ♦	LD	Light Duty	8…10	100% continuous current, 110% current for 1 minute.
	ND	Normal Duty		100% continuous current, 110% current for 1 minute, 150% for 3 seconds.
	HD	Heavy Duty		100% continuous current, 150% current for 1 minute, 180% for 3 seconds.
Power Disconnect Δ	P3	Input Thermal Magnetic Circuit Breaker	8…10	This option is for disconnecting drive power. An Allen-Bradley 140U Molded Case Circuit Breaker is provided. All switches include flange style handle operators that are door interlocking and padlockable.
	P5	Input Non-Fused Molded Case Disconnect Switch	8 Only	This option is for disconnecting drive power. An Allen-Bradley 140U Molded Case Switch is provided. All switches include flange style handle operators that are door interlocking and padlockable. Please note that PowerFlex 755 Frame 8 converter modules have input fuses installed as standard equipment.
Wiring Only Bay	P14	Wiring Only Bay	8…10	This option identifies that an extra bay will be provided for the purpose of wiring the drive. This option will extend the drive power bus from the drive bay into the option bay, making field connection options more flexible. No drive input protection is supplied with this option. Documentation to reflect input disconnection and protection is customer supplied. See page 103 for more information on power cable entry/exit locations.

‡ Frame 9 and 10 drives require an 800 mm deep option bay when selecting any of the options on this page.
Δ Only one option of this type may be selected.
♦ See previous selection tables for specific rating information.

Additional Options ‡

Type	Option		Applicable Frame	Description
Contactors Δ ♠	P11	Input Contactor	8 Only	A contactor is provided between the AC line and the drive. The contactor is controlled by customer supplied 120V AC (480V input) or 230V AC (400V input) remote contact closure logic. A terminal block for control is provided for customer use, and is wired to 1 N.O. and 1 N.C. auxiliary contact on the contactor. **Important:** The P11 option "Alternate Contact Circuit" is not intended to be used as a Start/Stop circuit.
	P12	Output Contactor	8 Only	A contactor is provided between the drive output and the motor. The contactor is controlled by customer supplied 120V AC (480V input) or 230V AC (400V input) remote contact closure logic. A terminal block for control is provided for customer use and is wired to 1 N.O. and 1 N.C. auxiliary contact on the contactor. **Note:** As an alternative to an output contactor, certain safety applications can be satisfied using the PowerFlex 750-Series Safe Torque-Off Option Card (Cat. No. 20-750-S). Safe Torque-Off is ideal for safety related applications requiring removal of rotational power to the motor without removing power from the drive. Safe Torque-Off functionality offers the benefit of quick start-up after a demand on the safety system and helps reduce wear from repetitive start-up. It also provides safety ratings up to and including SIL CL3, PLe, and CAT 3.
Reactors Δ ♣	L1	3% Input Reactor	8…9	Provides an open core drive input line reactor that mounts inside the drive enclosure. Typical impedance is 3%.
	L2	3% Output Reactor	8…9	Provides an open core drive output load reactor, which mounts inside the drive enclosure. Typical impedance is 3%.
	L3	5% Input Reactor	8 Only	Provides an open core drive input line reactor that mounts inside the drive enclosure. Typical impedance is 5%.
	L4	5% Output Reactor	8 Only	Provides an open core drive output load reactor, which mounts inside the drive enclosure. Typical impedance is 5%.
MCC Power Bus Capacity Δ	P20	1250 Amp Bus	8…10	Provides a 1250 Amp MCC Bus.
	P22	2000 Amp Bus	8…10	Provides a 2000 Amp MCC Bus.
	P24	3000 Amp Bus	8…10	Provides a 3000 Amp MCC Bus.
UPS Control Bus	P30	UPS Control Bus, DC Input w/Precharge	8…10	Provides a UPS Control Bus, DC Input w/Precharge only.

‡ Frame 9 and 10 drives require an 800 mm deep option bay when selecting any of the options on this page.
Δ Only one option of this type may be selected.
♠ Contactor options are not available for systems with MCC power bus.
♣ To accommodate a larger reactor, an 800 mm deep cabinet must be selected for the following Frame 8 drives;
- C750, C770, D710, D740 light duty (LD)
- C770 normal-duty (ND).

Drive Options - DC Input with Precharge (2500 MCC Style Cabinet)

To configure a catalog number for a drive with options:

1. Select the base drive catalog number from the tables that follow.
2. Select the System Overload Duty Cycle and MCC Power Bus Capacity from the Required Options table below. Add the UPC Control Bus option (if needed) to the end of the base catalog number, separating it with a dash. For example: 21G14TF500AN0NNNNN-**ND-P22-P30**.

Required Options ‡

Type	Option		Applicable Frame	Description
System Overload Duty Cycle Δ♦	LD	Light Duty	8…10	100% continuous current, 110% current for 1 minute.
	ND	Normal Duty		100% continuous current, 110% current for 1 minute, 150% for 3 seconds.
	HD	Heavy Duty		100% continuous current, 150% current for 1 minute, 180% for 3 seconds.
MCC Power Bus Capacity Δ	P20	1250 Amp Bus	8…10	Provides a 1250 Amp MCC Bus.
	P22	2000 Amp Bus	8…10	Provides a 2000 Amp MCC Bus.
	P24	3000 Amp Bus	8…10	Provides a 3000 Amp MCC Bus.

‡ Frame 9 and 10 drives require an 800 mm deep option bay when selecting any of the options on this page.
Δ Only one option of this type may be selected.
♦ See previous selection tables for specific rating information.

Additional Options ‡

Type	Option		Applicable Frame	Description
UPS Control Bus	P30	UPS Control Bus, DC Input w/Precharge	8…10	Provides a UPS Control Bus, DC Input w/Precharge only.

‡ Frame 9 and 10 drives require an 800 mm deep option bay when selecting any of the options on this page.

IP20, NEMA/UL Type 1 and Options (2500 MCC Style Cabinet)

380…400V AC, Three-Phase and 540V DC Input Drives ♣ ∇

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Base Drive Cat. No. ★ §	Frame Size
540	594	NA	315	460	506	693	250	385	578	693	200	**21G1A‡C460JN0NNNNN**	8
585	644		315	540	594	821	315	456	684	821	250	**21G1A‡C540JN0NNNNN**	8
612	673		355	567	624	851	315	472	708	851	250	**21G1A‡C567JN0NNNNN**	8
750	825		400	650	715	975	355	540	810	975	315	**21G1A‡C650JN0NNNNN**	8
796	876		450	750	825	1125	400	585	878	1125	315	**21G1A‡C750JN0NNNNN**	8
832	915		450	770	847	1155	400	642	963	1155	355	**21G1A‡C770JN0NNNNN**	8
1040	1144		560	910	1001	1365	500	750	1125	1365	400	**21G11‡C910JN0NNNNN**	9
1090	1199		630	1040	1144	1584	560	880	1320	1584	500	**21G11‡C1K0JN0NNNNN**	9
1175	1293		710	1090	1199	1638	630	910	1365	1638	500	**21G11‡C1K1JN0NNNNN**	9
1465	1612		800	1175	1293	1872	710	1040	1560	1962	560	**21G11‡C1K2JN0NNNNN**	9
1480	1628		850	1465	1612	2198	800	1090	1635	2198	630	**21G11‡C1K4JN0NNNNN**	9
1600	1760		900	1480	1628	2220	850	1175	1763	2220	710	**21G11‡C1K5JN0NNNNN**	9
1715	1887		1000	1590	1749	2385	900	1325	1988	2385	710	**21G11‡C1K6JN0NNNNN**	10
2330	2563		1400	2150	2365	3225	1250	1800	2700	3225	1000	**21G11‡C2K1JN0NNNNN**	10

§ The 5th character determines Input Type. "1" = AC & DC input w/precharge. "4" = DC input w/precharge. "A" = AC input w/precharge & no DC terminals.

‡ The 6th character determines Enclosure Type & Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. "P" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style w/MCC bus, 800 mm (31.5 in.) deep. "W" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style w/MCC bus, 800 mm (31.5 in.) deep, gray. Refer to the Power Wiring Options table.

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

480V AC, Three-Phase and 650V DC Input Drives ♣ ∇

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Base Drive Cat. No. §	Frame Size
485	534	NA	400	430	473	666	350	370	555	666	300	**21G1A‡D430AN0NNNNN**	8
545	600		450	485	534	745	400	414	621	745	350	**21G1A‡D485AN0NNNNN**	8
590	649		500	545	600	818	450	454	681	818	350	**21G1A‡D545AN0NNNNN**	8
710	781		600	617	679	926	500	485	728	926	400	**21G1A‡D617AN0NNNNN**	8
765	842		650	710	781	1065	600	545	818	1065	450	**21G1A‡D710AN0NNNNN**	8
800	880		700	740	817	1110	650	617	926	1110	500	**21G1A‡D740AN0NNNNN**	8
960	1056		800	800	880	1278	700	710	1065	1278	600	**21G11‡D800AN0NNNNN**	9
1045	1150		900	960	1056	1440	800	795	1193	1440	700	**21G11‡D960AN0NNNNN**	9
1135	1249		1000	1045	1150	1568	900	800	1200	1568	750	**21G11‡D1K0AN0NNNNN**	9
1365	1502		1100	1135	1249	1728	1000	960	1440	1728	800	**21G11‡D1K2AN0NNNNN**	9
1420	1562		1250	1365	1502	2048	1100	1045	1568	2048	900	**21G11‡D1K3AN0NNNNN**	9
1540	1694		1350	1420	1562	2130	1250	1135	1703	2130	1000	**21G11‡D1K4AN0NNNNN**	9
1655	1821		1500	1525	1678	2288	1350	1270	1905	2288	1100	**21G11‡D1K5JN0NNNNN**	10
2240	2464		2000	2070	2277	3105	1750	1730	2595	3105	1650	**21G11‡D2K0JN0NNNNN**	10

§ The 5th character determines Input Type. "1" = AC & DC input w/precharge. "4" = DC input w/precharge. "A" = AC input w/precharge & no DC terminals.

‡ The 6th character determines Enclosure Type & Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. "P" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style w/MCC bus, 800 mm (31.5 in.) deep. "W" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style w/MCC bus, 800 mm (31.5 in.) deep, gray. Refer to the Power Wiring Options table.

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

600V AC, Three-Phase and 810V DC Input Drives ♣ ∇

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Base Drive Cat. No. §	Frame Size
355	391	NA	350	295	325	490	300	272	408	490	250	**21G1A‡E295AN0NNNNN**	8
395	435		400	355	391	533	350	295	443	533	300	**21G1A‡E355AN0NNNNN**	8
435	479		450	395	435	593	400	329	494	593	350	**21G1A‡E395AN0NNNNN**	8
460	506		500	435	479	639	450	355	533	639	350	**21G1A‡E435AN0NNNNN**	8
510	561		500	460	506	711	500	395	593	711	400	**21G1A‡E460AN0NNNNN**	8
545	600		550	510	561	765	500	425	638	765	450	**21G1A‡E510AN0NNNNN**	8
690	759		700	595	655	918	600	510	765	918	500	**21G11‡E595AN0NNNNN**	9
760	836		800	630	693	1071	700	595	893	1071	600	**21G11‡E630AN0NNNNN**	9
835	919		900	760	836	1140	800	630	945	1140	700	**21G11‡E760AN0NNNNN**	9
900	990		950	825	908	1260	900	700	1050	1260	750	**21G11‡E825AN0NNNNN**	9
980	1078		1000	900	990	1368	950	760	1140	1368	800	**21G11‡E900AN0NNNNN**	9
1045	1150		1100	980	1078	1470	1000	815	1223	1470	900	**21G11‡E980AN0NNNNN**	9
1220	1342		1200	1110	1221	1665	1100	920	1380	1665	1000	**21G11‡E1K1AN0NNNNN**	10
1530	1683		1500	1430	1573	2145	1400	1190	1785	2145	1250	**21G11‡E1K4AN0NNNNN**	10

§ The 5th character determines Input Type. "1" = AC & DC input w/precharge. "4" = DC input w/precharge. "A" = AC input w/precharge & no DC terminals.

‡ The 6th character determines Enclosure Type & Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. "P" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style w/MCC bus, 800 mm (31.5 in.) deep. "W" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style w/MCC bus, 800 mm (31.5 in.) deep, gray. Refer to the Power Wiring Options table.

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124

♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

690V AC, Three-Phase and 932V DC Input Drives ♣ ∇

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Base Drive Cat. No. ★ §	Frame Size
330	363	NA	315	265	292	375	250	215	323	375	200	**21G1A‡F265AN0NNNNN**	8
370	407		355	330	363	473	315	265	398	473	250	**21G1A‡F330AN0NNNNN**	8
410	451		400	370	407	555	355	308	462	555	300	**21G1A‡F370AN0NNNNN**	8
460	506		450	415	457	639	400	370	555	639	355	**21G1A‡F415AN0NNNNN**	8
500	550		500	460	506	675	450	375	563	675	375	**21G1A‡F460AN0NNNNN**	8
530	583		530	500	550	750	500	413	620	750	400	**21G1A‡F500AN0NNNNN**	8
650	715		630	590	649	885	560	460	690	885	450	**21G11‡F590AN0NNNNN**	9
710	781		710	650	715	975	630	500	750	975	500	**21G11‡F650AN0NNNNN**	9
790	869		800	710	781	1065	710	590	885	1065	560	**21G11‡F710AN0NNNNN**	9
860	946		850	765	842	1170	750	650	975	1170	630	**21G11‡F765AN0NNNNN**	9
960	1056		900	795	875	1350	800	750	1125	1350	710	**21G11‡F795AN0NNNNN**	9
1020	1122		1000	960	1056	1440	900	795	1193	1440	800	**21G11‡F960AN0NNNNN**	9
1150	1265		1100	1040	1144	1560	1000	865	1298	1560	900	**21G11‡F1K0AN0NNNNN**	10
1485	1634		1500	1400	1540	2100	1400	1160	1740	2100	1120	**21G11‡F1K4AN0NNNNN**	10

§ The 5th character determines Input Type. "1" = AC & DC input w/precharge. "4" = DC input w/precharge. "A" = AC input w/precharge & no DC terminals.

‡ The 6th character determines Enclosure Type & Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. "P" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style w/MCC bus, 800 mm (31.5 in.) deep. "W" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style w/MCC bus, 800 mm (31.5 in.) deep, gray. Refer to the Power Wiring Options table.

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

IP54, NEMA Type 12 and Options (2500 MCC Style Cabinet)

380…400V AC, Three-Phase and 540V DC Input Drives ♣ ∇

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Base Drive Cat. No. ★ §	Frame Size
540	594	NA	315	460	506	693	250	385	578	693	200	**21G1A‡C460JN0NNNNN**	8
585	644		315	540	594	821	315	456	684	821	250	**21G1A‡C540JN0NNNNN**	8
612	673		355	567	624	851	315	472	708	851	250	**21G1A‡C567JN0NNNNN**	8
750	825		400	650	715	975	355	540	810	975	315	**21G1A‡C650JN0NNNNN**	8
796	876		450	750	825	1125	400	585	878	1125	315	**21G1A‡C750JN0NNNNN**	8
832	915		450	770	847	1155	400	642	963	1155	355	**21G1A‡C770JN0NNNNN**	8
1040	1144		560	910	1001	1365	500	750	1125	1365	400	**21G11‡C910JN0NNNNN**	9
1090	1199		630	1040	1144	1584	560	880	1320	1584	500	**21G11‡C1K0JN0NNNNN**	9
1175	1293		710	1090	1199	1638	630	910	1365	1638	500	**21G11‡C1K1JN0NNNNN**	9
1465	1612		800	1175	1293	1872	710	1040	1560	1962	560	**21G11‡C1K2JN0NNNNN**	9
1480	1628		850	1465	1612	2198	800	1090	1635	2198	630	**21G11‡C1K4JN0NNNNN**	9
1600	1760		900	1480	1628	2220	850	1175	1763	2220	710	**21G11‡C1K5JN0NNNNN**	9
1715	1887		1000	1590	1749	2385	900	1325	1988	2385	710	**21G11‡C1K6JN0NNNNN**	10
2330	2563		1400	2150	2365	3225	1250	1800	2700	3225	1000	**21G11‡C2K1JN0NNNNN**	10

§ The 5th character determines Input Type. "1" = AC & DC input w/precharge. "4" = DC input w/precharge. "A" = AC input w/precharge & no DC terminals.

‡ The 6th character determines Enclosure Type & Depth. "K" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, standard color. "Y" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, gray. Refer to the Power Wiring Options table.

★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

480V AC, Three-Phase and 650V DC Input Drives ♣ ∇

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Base Drive Cat. No. §	Frame Size
485	534	NA	400	430	473	666	350	370	555	666	300	**21G1A‡D430AN0NNNNN**	8
545	600		450	485	534	745	400	414	621	745	350	**21G1A‡D485AN0NNNNN**	8
590	649		500	545	600	818	450	454	681	818	350	**21G1A‡D545AN0NNNNN**	8
710	781		600	617	679	926	500	485	728	926	400	**21G1A‡D617AN0NNNNN**	8
765	842		650	710	781	1065	600	545	818	1065	450	**21G1A‡D710AN0NNNNN**	8
800	880		700	740	817	1110	650	617	926	1110	500	**21G1A‡D740AN0NNNNN**	8
960	1056		800	800	880	1278	700	710	1065	1278	600	**21G11‡D800AN0NNNNN**	9
1045	1150		900	960	1056	1440	800	795	1193	1440	700	**21G11‡D960AN0NNNNN**	9
1135	1249		1000	1045	1150	1568	900	800	1200	1568	750	**21G11‡D1K0AN0NNNNN**	9
1365	1502		1100	1135	1249	1728	1000	960	1440	1728	800	**21G11‡D1K2AN0NNNNN**	9
1420	1562		1250	1365	1502	2048	1100	1045	1568	2048	900	**21G11‡D1K3AN0NNNNN**	9
1540	1694		1350	1420	1562	2130	1250	1135	1703	2130	1000	**21G11‡D1K4AN0NNNNN**	9
1655	1821		1500	1525	1678	2288	1350	1270	1905	2288	1100	**21G11‡D1K5JN0NNNNN**	10 ♣
2240	2464		2000	2070	2277	3105	1750	1730	2595	3105	1650	**21G11‡D2K0JN0NNNNN**	10 ♣

§ The 5th character determines Input Type. "1" = AC & DC input w/precharge. "4" = DC input w/precharge. "A" = AC input w/precharge & no DC terminals.

‡ The 6th character determines Enclosure Type & Depth. "K" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, standard color. "Y" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, gray. Refer to the Power Wiring Options table.

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

600V AC, Three-Phase and 810V DC Input Drives ♣ ∇

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Base Drive Cat. No. §	Frame Size
355	391	NA	350	295	325	490	300	272	408	490	250	**21G1A‡E295AN0NNNNN**	8
395	435		400	355	391	533	350	295	443	533	300	**21G1A‡E355AN0NNNNN**	8
435	479		450	395	435	593	400	329	494	593	350	**21G1A‡E395AN0NNNNN**	8
460	506		500	435	479	639	450	355	533	639	350	**21G1A‡E435AN0NNNNN**	8
510	561		500	460	506	711	500	395	593	711	400	**21G1A‡E460AN0NNNNN**	8
545	600		550	510	561	765	500	425	638	765	450	**21G1A‡E510AN0NNNNN**	8
690	759		700	595	655	918	600	510	765	918	500	**21G11‡E595AN0NNNNN**	9
760	836		800	630	693	1071	700	595	893	1071	600	**21G11‡E630AN0NNNNN**	9
835	919		900	760	836	1140	800	630	945	1140	700	**21G11‡E760AN0NNNNN**	9
900	990		950	825	908	1260	900	700	1050	1260	750	**21G11‡E825AN0NNNNN**	9
980	1078		1000	900	990	1368	950	760	1140	1368	800	**21G11‡E900AN0NNNNN**	9
1045	1150		1100	980	1078	1470	1000	815	1223	1470	900	**21G11‡E980AN0NNNNN**	9
1220	1342		1200	1110	1221	1665	1100	920	1380	1665	1000	**21G11‡E1K1AN0NNNNN**	10
1530	1683		1500	1430	1573	2145	1400	1190	1785	2145	1250	**21G11‡E1K4AN0NNNNN**	10

§ The 5th character determines Input Type. "1" = AC & DC input w/precharge. "4" = DC input w/precharge. "A" = AC input w/precharge & no DC terminals.

‡ The 6th character determines Enclosure Type & Depth. "K" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, standard color. "Y" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, gray. Refer to the Power Wiring Options table.

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

690V AC, Three-Phase and 932V DC Input Drives ♣ ∇

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Base Drive Cat. No. ★ §	Frame Size
330	363	NA	315	265	292	375	250	215	323	375	200	**21G1A‡F265AN0NNNNN**	8
370	407		355	330	363	473	315	265	398	473	250	**21G1A‡F330AN0NNNNN**	8
410	451		400	370	407	555	355	308	462	555	300	**21G1A‡F370AN0NNNNN**	8
460	506		450	415	457	639	400	370	555	639	355	**21G1A‡F415AN0NNNNN**	8
500	550		500	460	506	675	450	375	563	675	375	**21G1A‡F460AN0NNNNN**	8
530	583		530	500	550	750	500	413	620	750	400	**21G1A‡F500AN0NNNNN**	8
650	715		630	590	649	885	560	460	690	885	450	**21G11‡F590AN0NNNNN**	9
710	781		710	650	715	975	630	500	750	975	500	**21G11‡F650AN0NNNNN**	9
790	869		800	710	781	1065	710	590	885	1065	560	**21G11‡F710AN0NNNNN**	9
860	946		850	765	842	1170	750	650	975	1170	630	**21G11‡F765AN0NNNNN**	9
960	1056		900	795	875	1350	800	750	1125	1350	710	**21G11‡F795AN0NNNNN**	9
1020	1122		1000	960	1056	1440	900	795	1193	1440	800	**21G11‡F960AN0NNNNN**	9
1150	1265		1100	1040	1144	1560	1000	865	1298	1560	900	**21G11‡F1K0AN0NNNNN**	10
1485	1634		1500	1400	1540	2100	1400	1160	1740	2100	1120	**21G11‡F1K4AN0NNNNN**	10

§ The 5th character determines Input Type. "1" = AC & DC input w/precharge. "4" = DC input w/precharge. "A" = AC input w/precharge & no DC terminals.

‡ The 6th character determines Enclosure Type & Depth. "K" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, standard color. "Y" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, gray. Refer to the Power Wiring Options table.

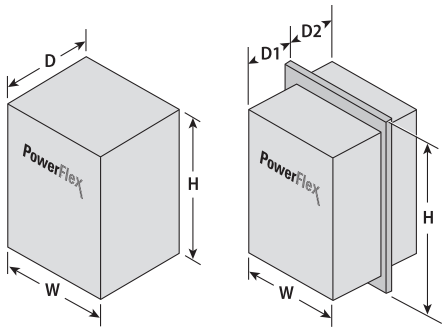
★ The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

∇ A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 124.

♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP00/IP20, NEMA/UL Type Open

Frame	H	W	D	Weight
1	400.5 (15.77)	110.0 (4.33)	211.0 (8.31)	6.00 (12.8)
2	424.2 (16.70)	134.5 (5.30)	212.0 (8.35)	7.80 (17.2)
3	454.0 (17.87)	190.0 (7.48)	212.0 (8.35)	11.80 (26.1)
4	474.0 (18.66)	222.0 (8.74)	212.0 (8.35)	13.60 (30.0)
5	550.0 (21.65)	270.0 (10.63)	212.0 (8.35)	20.40 (45.0)
6	665.5 (26.20)	308.0 (12.13)	346.4 (13.64)	38.60 (85.0)
7	881.5 (34.70)	430.0 (16.93)	349.6 (13.76)	72.60…108.90 (160.0…240.0)

IP20, NEMA/UL Type 1, MCC Style Cabinet

Frame	H	W	D	Weight ★
8	2453.0 (96.60)	600.0 (23.60)	600.0 (23.60) or 800.0 (31.50)	623.00 (1374.0)
8 w/Drive and Option Cabinet	2453.0 (96.60)	1200.0 (47.20)	600.0 (23.60) or 800.0 (31.50)	1145.00 (2525.0)
9	2453.0 (96.60)	1200.0 (47.20)	600.0 (23.60) or 800.0 (31.50)	1246.00 (2748.0)
9 w//Drive and Option Cabinet	2453.0 (96.60)	1800.0 (70.90)	800.0 (31.50)	2290.00 (5051.0)
10	2453.0 (96.60)	1800.0 (70.90)	600.0 (23.60) or 800.0 (31.50)	1869.00 (4122.0)
10 w//Drive and Option Cabinet	2453.0 (96.60)	2400.0 (94.50)	800.0 (31.50)	3435.00 (7576.0)

★ Weights are approximate. Refer to the PowerFlex 750-Series Technical Data for detailed weight information.

Flange Mount

Frame	H	W	D1	D2	Weight ★
2	481.8 (18.97)	206.2 (8.12)	148.3 (5.84)	63.7 (2.51)	8.00 (17.0)
3	515.0 (20.28)	260.0 (10.24)	127.4 (5.02)	84.6 (3.33)	12.00 (26.0)
4	535.0 (21.06)	292.0 (11.50)	127.4 (5.02)	84.6 (3.33)	14.00 (30.0)
5	611.0 (24.06)	340.0 (13.39)	127.4 (5.02)	84.6 (3.33)	20.00 (45.0)
6	665.5 (26.20)	308.0 (12.13)	208.4 (8.20)	138.0 (5.43)	38.00 (84.0)
7	875.0 (34.45)	430.0 (16.93)	208.4 (8.20)	138.0 (5.43)	96.00 (212.0)

★ Weights are approximate. Refer to the PowerFlex 750-Series Technical Data for detailed weight information.

IP54, NEMA/UL Type 12

Frame	H	W	D	Weight ★
2	543.2 (21.39)	215.3 (8.48)	222.2 (8.75)	8.00 (17.0)
3	551.0 (21.69)	268.0 (10.55)	220.1 (8.67)	12.00 (26.0)
4	571.0 (22.48)	300.0 (11.81)	220.1 (8.67)	14.00 (30.0)
5	647.0 (25.47)	348.0 (13.70)	220.1 (8.67)	20.00 (45.0)
6	1298.3 (51.11)	609.4 (23.99)	464.7 (18.30)	91.00 (200.0)
7	1614.0 (63.54)	609.4 (23.99)	464.7 (18.30)	162.00 (357.0)

★ Weights are approximate. Refer to the PowerFlex 750-Series Technical Data for detailed weight information.

IP54, NEMA Type 12, MCC Style Cabinet

Frame	H	W	D	Weight ★
8	2477.0 (97.50)	600.0 (23.60)	800.0 (31.50) 898.0 (35.40) w/Filter	644.00 (1419.0)
8 w/Drive and Option Cabinets	2477.0 (97.50)	1200.0 (47.20)	800.0 (31.50) 898.0 (35.40) w/Filter	1166.00 (2570.0)
9	2477.0 (97.50)	1200.0 (47.20)	800.0 (31.50) 898.0 (35.40) w/Filter	1287.00 (2838.0)
9 w//Drive and Option Cabinets	2477.0 (97.50)	1800.0 (70.90)	800.0 (31.50) 898.0 (35.40) w/Filter	2332.00 (5141.0)
10	2477.0 (97.50)	1800.0 (70.90)	800.0 (31.50) 898.0 (35.40) w/Filter	1931.00 (4257.0)
10 w//Drive and Option Cabinets	2477.0 (97.50)	2400.0 (94.50)	800.0 (31.50) 898.0 (35.40) w/Filter	3498.00 (7711.0)

★ Weights are approximate. Refer to the PowerFlex 750-Series Technical Data for detailed weight information.

IP00, NEMA/UL Open Type ★

Frame	H	W	D
8	2145.0 (84.45)	777.9 (30.63)	424.9 (16.73)
9	2145.0 (84.45)	1577.8 (62.12)	424.9 (16.73)
10	2145.0 (84.45)	2377.9 (93.62)	424.9 (16.73)

★ Refer to the PowerFlex 750-Series Technical Data for detailed information.

Maximum Component Weights - Frames 8…10

Component	AC Input	Common DC Input
Converter/DC Input w/Precharge	64.00 (140.0)	64.00 (140.0)
Inverter	222.00 (490.0)	165.00 (363.0)
Drive Assembly (Open, IP00)	286.00 (630.0)	229.00 (504.0)

PowerFlex 7-Class Options

Blank Plate

20-HIM-A3

20-HIM-A5

20-HIM-A6

20-HIM-C3S

20-HIM-C5S

20-HIM-C6S

Human Interface Modules

Description	Cat. No.	Used with PowerFlex Drive					
		70	700	700H	700S	700L	753/755
No HIM (Blank Plate), Handheld/Local (Drive Mount)	**20-HIM-A0**	✓	✓	✓	✓	✓	✓
LCD Display, Full Numeric Keypad, Handheld/Local (Drive Mount)	**20-HIM-A3**	✓	✓	✓	✓	✓	
LCD Display, Programmer Only, Handheld/Local (Drive Mount)	**20-HIM-A5**	✓	✓	✓	✓	✓	
Enhanced, LCD, Full Numeric Keypad, Handheld/Local (Drive Mount)	**20-HIM-A6**	✓	✓	✓	✓	✓	✓ §
Remote (Panel Mount) LCD Display, Full Numeric Keypad ★‡	**20-HIM-C3S**	✓	✓	✓	✓	✓	
Remote (Panel Mount) LCD Display, Programmer Only ★‡	**20-HIM-C5S**	✓	✓	✓	✓	✓	
Enhanced, LCD, Full Numeric Keypad ★‡	**20-HIM-C6S**	✓	✓	✓	✓	✓	✓ ♦

★ IP66, NEMA Type 4X/12 - For indoor use only.
‡ Includes a 1202-C30 interface cable (3 meters) for connection to drive.
§ Select for Frames 2…5 IP54, NEMA/UL Type 12 drives.
♦ Select for Frames 6…7 IP54, NEMA/UL Type 12 drives.

Human Interface Module Accessories

Description	Cat. No.	Used with PowerFlex Drive					
		70	700	700H	700S	700L	753/755
Bezel Kit for LCD HIMs, NEMA Type 1 ‡	**20-HIM-B1**	✓	✓	✓	✓	✓	✓
PowerFlex HIM Interface Cable, 1 m (39 in) ♣	**20-HIM-H10**	✓	✓	✓	✓	✓	✓
Comm Option Cable Kit (Male-Male)							
0.33 Meters (1.1 Feet)	**1202-C03**	✓	✓	✓	✓	✓	✓
1 Meter (3.3 Feet)	**1202-C10**	✓	✓	✓	✓	✓	✓
3 Meter (9.8 Feet)	**1202-C30**	✓	✓	✓	✓	✓	✓
9 Meter (29.5 Feet)	**1202-C90**	✓	✓	✓	✓	✓	✓
Cable Kit (Male-Female) Δ							
0.33 Meters (1.1 Feet)	**1202-H03**	✓	✓	✓	✓	✓	✓
1 Meter (3.3 Feet)	**1202-H10**	✓	✓	✓	✓	✓	✓
3 Meter (9.8 Feet)	**1202-H30**	✓	✓	✓	✓	✓	✓
9 Meter (29.5 Feet)	**1202-H90**	✓	✓	✓	✓	✓	✓
DPI™ Cable Kit with Connectors, Tools and 100 m (328 ft) Cable	**1202-CBL-KIT-100M**	✓	✓	✓	✓	✓	✓
DPI Cable Connector Kit	**1202-TB-KIT-SET**	✓	✓	✓	✓	✓	✓
DPI/SCANport™ One to Two Port Splitter Cable	**1203-S03**	✓	✓	✓	✓	✓	✓

‡ Includes a 1202-C30 interface cable (3 meters) for connection to drive.
♣ Required only when HIM is used as handheld or remote.
Δ Required in addition to 20-HIM-H10 for distances up to a total maximum of 10 Meters (32.8 Feet).

Communication Option Kits

Description	Cat. No.	Used with PowerFlex Drive					
		70	700	700H	700S	700L	753/755
BACnet/IP Option Module	**20-750-BNETIP**						✓
BACnet® MS/TP RS485 Communication Adapter	**20-COMM-B**	✓	✓	✓			
Coaxial ControlNet™ Option Module	**20-750-CNETC**						✓
ControlNet™ Communication Adapter (Coax)	**20-COMM-C**	✓	✓	✓	✓	✓	✓ §
ControlNet™ Communication Adapter (Coax) Conformal Coat	**20-COMM-C-MX3**	✓	✓	✓	✓	✓	✓ §
DeviceNet™ Option Module	**20-750-DNET**						✓
DeviceNet™ Communication Adapter	**20-COMM-D**	✓	✓	✓	✓	✓	✓ §
DeviceNet™ Communication Adapter Conformal Coat	**20-COMM-D-MX3**	✓	✓	✓	✓	✓	✓ §
Dual-port EtherNet/IP Option Module	**20-750-ENETR**						✓
EtherNet/IP™ Communication Adapter	**20-COMM-E**	✓	✓	✓	✓	✓	✓ §
EtherNet/IP™ Communication Adapter Conformal Coat	**20-COMM-E-MX3**	✓	✓	✓	✓	✓	✓ §
Dual-port EtherNet/IP™ Communication Adapter	**20-COMM-ER**	✓ ♣	✓ ♣	✓ ♣	✓ ♣	✓ ♣	
HVAC Communication Adapter	**20-COMM-H**	✓	✓	✓	✓ ♠	✓	✓ §
CANopen® Communication Adapter	**20-COMM-K**	✓	✓	✓	✓	✓	✓ §
LonWorks® Communication Adapter	**20-COMM-L**	✓	✓	✓			✓ §
Modbus/TCP Communication Adapter	**20-COMM-M**	✓	✓	✓	✓	✓	✓ §
Profibus DPV1 Option Module	**20-750-PBUS**						✓
Single-port Profinet I/O Option Module	**20-750-PNET**						✓ ♣
Dual-port Profinet I/O Option Module	**20-750-PNET2P**						✓ ♣
PROFIBUS™ DP Communication Adapter	**20-COMM-P**	✓	✓	✓	✓	✓	✓ §
ControlNet™ Communication Adapter (Fiber)	**20-COMM-Q**	✓	✓	✓	✓	✓	✓ §&
Remote I/O Communication Adapter Δ	**20-COMM-R**	✓	✓	✓	✓	✓	✓ §
Remote I/O Communication Adapter Conformal Coat Δ	**20-COMM-R-MX3**	✓	✓	✓	✓	✓	✓ §
RS485 DF1 Communication Adapter	**20-COMM-S**	✓	✓	✓	✓	✓	✓ §
RS485 DF1 Communication Adapter Conformal Coat	**20-COMM-S-MX3**	✓	✓	✓	✓	✓	✓ §
External Communications Kit Power Supply	**20-XCOMM-AC-PS1**	✓	✓	✓	✓	✓	✓
DPI External Communications Kit	**20-XCOMM-DC-BASE**	✓	✓	✓	✓	✓	✓
External DPI I/O Option Board ♦	**20-XCOMM-IO-OPT1**	✓	✓	✓	✓	✓	✓
Compact I/O Module (3 Channel)	**1769-SM1**	✓	✓	✓	✓	✓	✓
DriveLogix ControlNet Communication Adapter (Coax) ‡	**1788-CNC**				✓	✓ ∇	
DriveLogix Comm Option, ControlNet Redundant (Coax) ‡	**1788-CNCR**				✓	✓ ∇	
DriveLogix Comm Option, ControlNet (Fiber) ‡	**1788-CNF**				✓	✓ ∇	
DriveLogix Comm Option, ControlNet Redundant (Fiber) ‡	**1788-CNFR**				✓	✓ ∇	
DriveLogix Comm Option, DeviceNet (Open Conn.) ‡	**1788-DNBO**				✓	✓ ∇	
DriveLogix Comm Option, EtherNet/IP (Twisted Pair) ‡	**1788-ENBT**				✓	✓ ∇	
DriveLogix5730 Comm Option, Embedded EtherNet/IP	**20D-DL2-ENET0**				✓	✓ ∇	

♦ For use only with DPI External Communications Kits 20-XCOMM-DC-BASE.
♠ Only Modbus RTU can be used.
‡ For use with DriveLogix option only. Requires Logix Expansion Board (20D-DL2-LEB0).
§ Requires a Communication Carrier Card (20-750-20COMM or 20-750-20COMM-F1). Refer to page 122 for compatibility details.
∇ When using a PowerFlex 700S control.
Δ This item has Silver Series status. For information, refer to http://www.ab.com/silver.
& Not supported in Frame 1.
♣ Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

PowerFlex 750-Series Legacy Communication Compatibility

Most legacy communication adapters (20-COMM) can be used with the PowerFlex 753/755. However, the restrictions stated below do apply.

Frame 1 - It is recommended that the 20-750-20COMM-F1 Communication Carrier Card only be installed in Port 4. Port 5 will not be accessible when this module is installed.

Frames 2 and larger - It is recommended that the 20-750-20COMM Communication Carrier Card be installed in Port 6. Using Port 4 or 5 will make the adjacent left port inaccessible to other option modules and may interfere with network cable connections.

Adapter	Accesses Ports 2, 3 and 6 for I/O Connections (Implicit & Explicit Messaging)	Accesses Port 7…14 Devices	Supports Drive Add On Profiles	Supports Asian-Languages ♦
20-COMM-B	Not Compatible			
20-COMM-C	✓‡	✓ v3.001 ♣	✓ Δ	✓ v3.001 ♣
20-COMM-D		Not Compatible		
20-COMM-E		✓ v4.001 ♣	✓ Δ	✓ v4.001 ♣
20-COMM-H	✓ v2.009 §	Not Compatible		
20-COMM-K	✓ v1.001 ♣			
20-COMM-L	✓ v1.007 ♣			
20-COMM-M	✓‡	✓ v2.001 ♣	Not Compatible	✓ v2.001 ♣
20-COMM-Q	✓‡	✓ v3.001 ♣	✓ Δ	✓ v3.001 ♣
20-COMM-R		Not Compatible		
20-COMM-S				

‡ Controller must be capable of reading/writing 32-bit floating point (REAL) values.
§ Supports all three modes of operation (RTU, P1, N2).
♣ Requires this adapter firmware version or higher.
Δ Requires firmware version v1.05 or higher of the drive Add On Profiles for Studio 5000 Logix Designer software.
♦ Chinese, Japanese, and Korean languages are supported at the time of publication.

Communication Accessories

Description	Cat. No.	Used with PowerFlex Drive					
		70	700	700H	700S	700L	753/755
Serial Null Modem Adapter	1203-SNM	✓	✓	✓	✓	✓	✓
Smart Self-powered Serial Converter (RS232) includes 1203-SFC and 1202-C10 Cables	1203-SSS	✓	✓	✓	✓	✓	✓
Universal Serial Bus™ (USB) Converter includes 2m USB, 20-HIM-H10 & 22-HIM-H10 Cables	1203-USB	✓	✓	✓	✓	✓	✓
ControlNet T-tap straight	1786-TPS						✓
ControlNet T-tap right angle	1786-TPR				✓	✓	
Communication Carrier Card for PowerFlex 750-Series Frame 1 drives	20-750-20COMM-F1						✓
Communication Carrier Card for PowerFlex 750-Series Frame 2 or higher drives	20-750-20COMM						✓

I/O Option Kits

Description	Cat. No.	Used with PowerFlex Drive					
		70	700	700H	700S	700L	753/755
24V DC Digital Inputs (6) w/Analog I/O (4), Slot A ♠	20C-DA1-A			✓			
115V AC Digital Inputs (6) w/Analog I/O (4), Slot A ♠	20C-DA1-B			✓			
115V AC Digital Outputs (3), Slot B ♠	20C-DO1			✓			
24V DC I/O with 2 Analog In, 2 Analog Out, 6 Digital In and 2 Relay Outputs	20-750-2262C-2R						✓ §
115V AC I/O with 2 Analog In, 2 Analog Out, 6 Digital In and 2 Relay Outputs	20-750-2262D-2R						✓ §
24V DC I/O with 2 Analog In, 2 Analog Out, 6 Digital In, 3 Digital Out, 1 Relay & 2 Transistor Outputs	20-750-2263C-1R2T						✓ §

♠ Only one card allowed per slot.
§ I/O option kits are not allowed in CIP motion mode.

Safety Options

Description	Cat. No.	Used with PowerFlex Drive					
		70	700	700H	700S	700L	753/755
DriveGuard Safe Torque-Off	20A-DG01	✓					
DriveGuard Safe Torque-Off w/2nd Encoder	20D-P2-DG01				✓	✓ ∇	
Safe Torque-Off (ATEX capable) ♠	20C-DG1			✓			
Safe Torque-Off	20-750-S						✓ ★
Safe Speed Monitor	20-750-S1						✓ ★ ‡

♠ Only one card allowed per slot.

∇ When using PowerFlex 700S control. This option kit cannot be used on Frame 2 drives, however it is available as a factory installed option.

‡ Requires the Dual Incremental Encoder or Universal Feedback Option. Also requires the 20-750-EMCSSM1-F8 EMC Option Kit with Frame 8…9 drives.

★ Drive can accommodate only one option.

Feedback Options

Description	Cat. No.	Used with PowerFlex Drive					
		70	700	700H	700S	700L	753/755
5V/12V Encoder &	20A-ENC-1	✓					
12V/5V Encoder	20B-ENC-1		✓ #			✓ #	
12V/5V Encoder with Conformal Coat	20B-ENC-1-MX3		✓ #				
Multi-Device Interface ♦	20D-MDI-C2				✓	✓ ∇	
2nd Encoder, 5V/12V ♦	20D-P2-ENC0				✓	✓ ∇	
Resolver ♦	20D-RES-A1				✓	✓ ∇	
Stegmann High Resolution Hyperface Encoder ♦	20D-STEG-B1				✓	✓ ∇	
Heidenhain High Resolution EnDat Encoder	20D-HEID-D0				✓	✓ ∇	
Incremental Encoder	20-750-ENC-1						✓ ♠
Dual Incremental Encoder	20-750-DENC-1						✓ ♠
Universal Feedback (includes Stegmann, Heidenhain, SSI, Biss, 5V Incremental)	20-750-UFB-1						✓ ★

& Works only with PowerFlex 70 Enhanced Control.

♦ Requires Expanded Cassette

When using a PowerFlex 700 with Vector Control.

★ PowerFlex 755 only.

∇ When using a PowerFlex 700S control.

♠ Homing and registration functions are not supported when using this device with Studio 5000 Logix Designer embedded motion instructions. To use these functions, the Universal Feedback Board (20-750-UFB-1) must be used.

PowerFlex 700 Control Option Kits

Control with I/O	Factory Installed Cat. Code #	Cat. No.	Used with PowerFlex Drive					
			70	700	700H	700S	700L	753/755
Vector Control - 24V DC with: ∇								
60 Hz Maximum	NNAD	20B-VECT-C0AD		✓				
82 Hz Maximum	NNAX	20B-VECTB-C0AX		✓				
Cascading Fan/Pump Control	NNAE	20B-VECT-C0AE		✓				
Pump Off (for Pump Jack)	NNBA	20B-VECTB-C0BA		✓				
Vector Control - 24V DC, Conformal Coat ∇	–	20B-VECTB-C0-MX3		✓				
Vector Control - 115V AC ∇	D &	20B-VECTB-D0		✓				
Vector Control - 115V AC with: ∇								
60 Hz Maximum	NNAD	20B-VECT-D0AD		✓				
82 Hz Maximum	NNAX	20B-VECTB-D0AX		✓				
Cascading Fan/Pump Control	NNAE	20B-VECT-D0AE		✓				
Pump Off (for Pump Jack)	NNBA	20B-VECT-D0BA		✓				
Vector Control - 115V AC, Conformal Coat ∇	–	20B-VECTB-D0-MX3		✓				

∇ Vector Control option utilizes DPI Only.

This code is entered at the end of the drive catalog number (positions 17…20).

& This code is entered at position 15 of the drive catalog number.

PowerFlex 750-Series Option Kits

Description		Frame	Cat. No.	Used with PowerFlex Drive					
				70	700	700H	700S	700L	753/755
Auxiliary Power Supply	24V Aux Power Supply	2…7 Δ	**20-750-APS**						✓
DC Bus Bar Option Kit	DC Bus Bars for 380…480V AC drives	6	**20-750-DCBB1-F6**						✓
		7	**20-750-DCBB1-F7**						✓
	DC Bus Bars for 600…690V AC drives	6	**20-750-DCBB2-F6**						✓
		7	**20-750-DCBB2-F7**						✓
DC Bus Connection Kit	Connects the drive DC bus terminals to the cabinet bus rails.	8…10	**20-750-BUS1-F8**						✓
EMC Option Kit	EMC Plate with Core for 380…480V AC drives	1	**20-750-EMC1-F1**						✓
		2	**20-750-EMC1-F2**						✓
		3	**20-750-EMC1-F3**						✓
	EMC Plate with Core for 600…690V AC drives	3	**20-750-EMC3-F3**						✓
	EMC Plate with Cores for 380…480V AC drives	4	**20-750-EMC1-F4**						✓
		5	**20-750-EMC1-F5**						✓
	EMC Plate with Cores for 600…690V AC drives	4	**20-750-EMC3-F4**						✓
		5	**20-750-EMC3-F5**						✓
	EMC Core for 380…480V AC drives	1	**20-750-EMC2-F1**						✓
		2	**20-750-EMC2-F2**						✓
		3	**20-750-EMC2-F3**						✓
	EMC Core for 600…690V AC drives	3	**20-750-EMC4-F3**						✓
	EMC Cores for 380…480V AC drives	4…5	**20-750-EMC2-F45**						✓
	EMC Cores for 600…690V AC drives	4	**20-750-EMC4-F4**						✓
		5	**20-750-EMC4-F5**						✓
	EMC Plate with Cores for 600…690V AC drives	6	**20-750-EMC4-F6**						✓
		7	**20-750-EMC4-F7**						✓
	EMC Plate with Cores for 600…690V AC drives (IP54 Only)	6	**20-750-EMC5-F6**						✓
		7	**20-750-EMC5-F7**						✓
	EMC Core – Inverter-mounted output, for 380…690V AC input and DC input drives.	8…10	**20-750-EMCCM1-F8**						✓
	EMC Core – Cabinet-mounted input, for 380…690V Common DC Input drives only.	8…10	**20-750-CBPEMCCM1-F8**						✓
	EMC Core – Cabinet-mounted input, for 380…690V AC input drives only.	8…10	**20-750-EMCCM1-F9**						✓
	EMC Cores – Required when using the Safe Speed Monitor option 20-750-S1 with 380…690V drives.	8…10	**20-750-EMCSSM1-F8**						✓
	Door Shielding Kit	8…10	**20-750-EMCDK1-F10**						✓
Flange Adapter Kit	Converts Open Type drive to external heatsink (flange) with NEMA/UL Type 1 integrity backside. This kit is for use with IP20, NEMA/UL Type 0 drives and **will not provide** an air-tight or water-tight seal. Where sealing is required (e.g. contaminated, dirty or wet environments), a drive with an "F" enclosure option must be used.	2	**20-750-FLNG1-F2**						✓
		3	**20-750-FLNG1-F3**						✓
		4	**20-750-FLNG1-F4**						✓
		5	**20-750-FLNG1-F5**						✓
	Converts Open Type drive to external heatsink (flange) with NEMA/UL Type 4X/12 integrity backside.	6	**20-750-FLNG4-F6**						✓
		7	**20-750-FLNG4-F7**						✓
L Bus Bar Kit	Includes three L-brackets	8…10	**20-750-LBRKT1**						✓
NEMA/UL Type 1 Option Kit	NEMA/UL Type 1 Kit	1	**20-750-NEMA1-F1**						✓
		2	**20-750-NEMA1-F2**						✓
		3	**20-750-NEMA1-F3**						✓
		4	**20-750-NEMA1-F4**						✓
		5	**20-750-NEMA1-F5**						✓
		6	**20-750-NEMA1-F6**						✓
		7	**20-750-NEMA1-F7**						✓
Power Terminal Extension	Allows connection of two parallel leads to the AC terminals.	6	**20-750-ACTE1-F6**						✓
Power Terminal Guard	Provides additional ingress protection on power terminals.	6	**20-750-PTG1-F6**						✓
		7	**20-750-PTG1-F7**						✓

continued

PowerFlex 750-Series Option Kits (continued)

Description		Frame	Cat. No.	Used with PowerFlex Drive					
				70	700	700H	700S	700L	753/755
Remote Control POD Mounting Kit	Hardware, fiber-optic, and power supply cables to remotely mount the control POD up to 23 m (75 ft) from the drive.	8…10	20-750-RPD1-F8						✓
Roll-Out Cart	A wheeled roll-out cart that facilitates drive installation and removal. Required for Frame 8 and larger drives.	8…10	20-750-CART1-F8						✓

Δ Frame 8 and up drives can be powered from an external 24V DC source, a 20-750-APS is not required.

Other Options

Description	Cat. No.	Used with PowerFlex Drive					
		70	700	700H	700S	700L	753/755
115V AC Interface	AK-M9-115VAC-1	✓					
Frame E Flange Gasket	AK-M9-GASKET1-E4	✓					
Service Connection Board ★	SK-M9-SCB1	✓					
Removable I/O Terminal Block	SK-G9-TB1-S1		✓				
Removable Encoder Terminal Block	SK-G9-TB1-ENC1		✓				
Touch Cover - Converts IP00/Open Type drive to IP20/NEMA/UL Type 1. No wiring space provided.	20-OPT-TC			✓			
Top Hat - Converts IP00/Open Type drive to IP20/NEMA/UL Type 1. Allows for wiring space.	20-OPT-TH			✓			
Auxiliary Control Power Supply	20-24V-AUX1				✓		
PowerFlex 700S Phase II Control with Expanded Cassette	20D-P2-CKE1				✓	✓ ∇	
PowerFlex 700S Phase II Control with Slim Cassette	20D-P2-CKS1				✓		
PowerFlex 700S DriveLogix5730 Phase II Control with Expanded Cassette	20D-DL2-CKE1				✓	✓ ∇	
PowerFlex 700S DriveLogix5730 Phase II Control with Slim Cassette	20D-DL2-CKS1				✓		

★ Provides temporary DPI/HIM connection for NEMA/UL Type 1 and Flange drives with cover removed.
∇ When using PowerFlex 700S control and Expanded Cassette.

SynchLink Accessories

Description ★	Cat. No.	Used with PowerFlex Drive					
		70	700	700H	700S	700L	753/755
SynchLink Board	20D-P2-SLB0				✓	✓ ∇	
SynchLink Fiber Base Block	1751-SLBA				✓	✓ ∇	
SynchLink 4-port Fiber Splitter Block	1751-SL4SP				✓	✓ ∇	
SynchLink Fiber Bypass Switch Block	1751-SLBP				✓	✓ ∇	
2x3 Meter Fiber Link for Power Monitor/SynchLink	1403-CF003				✓	✓ ∇	
2x5 Meter Fiber Link for Power Monitor/SynchLink	1403-CF005				✓	✓ ∇	
10 Meter Fiber Link for Power Monitor/SynchLink	1403-CF010				✓	✓ ∇	

★ Refer to publication number 1769-SG001 for details on SynchLink.
∇ When using PowerFlex 700S control.

DriveLogix Option Kits

Description	Cat. No.	Used with PowerFlex Drive					
		70	700	700H	700S	700L	753/755
Logix Expansion board for DriveLogix5730 ♦	20D-DL2-LEB0				✓	✓ ∇	
Industrial Compact Flash 64 MB Memory Card for DriveLogix5730	1784-CF64				✓	✓ ∇	

♦ Requires Expanded Cassette.
∇ When using PowerFlex 700S control.

DriveLogix I/O Cables

Description	Cat. No.	Used with PowerFlex Drive					
		70	700	700H	700S	700L	753/755
DriveLogix5730 - Compact I/O cable, 3.28 ft. (1 meter), Left Bus Cap ♦ ♣	20D-DL2-CL3				✓	✓ ∇	
DriveLogix5730 - Compact I/O cable, 3.28 ft. (1 meter), Right Bus Cap ♦ ♣	20D-DL2-CR3				✓	✓ ∇	
Logix5000 RS-232 Programming Cable	1756-CP3				✓	✓ ∇	

♦ Requires Expanded Cassette.
♣ Refer to Publication 1769-SG001 for details and selection of Compact I/O.
∇ When using PowerFlex 700S control.

PowerFlex 70 Small Duty Internal Dynamic Brake Resistors

Limited duty resistors mount directly to the back surface of the drive and require no extra panel space. Internal resistors are non-destructive and do not require a resistor overheat external safety circuit.

PowerFlex 70 AC Drive			Small Duty Internal DB Resistor								
								Application Type 1		Application Type 2	
Normal Duty★ *kW (Hp)*	Heavy Duty★ *kW (Hp)*	Min DB Res *Ohms ±10%*	Cat. No.	Resistance‡ *Ohms ±5%*	Continuous Power *kW*	Max Energy *kJ*	Max Braking Torque *% of ND Motor*	Braking Torque *% of ND Motor*	Duty Cycle	Braking Torque *% of ND Motor*	Duty Cycle
200…240 Volt AC Input Drives											
0.37 (0.5)	0.25 (0.33)	33	**20AB-DB1-A**	62	0.048	8.3	307%	100%	25.9%	150%	17.3%
0.75 (1.0)	0.55 (0.75)	33	**20AB-DB1-A**	62	0.048	7.3	300%	100%	12.8%	150%	8.5%
1.5 (2.0)	1.1 (1.5)	33	**20AB-DB1-B**	62	0.028	0.8	160%	100%	3.7%	150%	2.5%
2.2 (3.0)	1.5 (2.0)	33	**20AB-DB1-B**	62	0.028	0.8	109%	100%	2.5%	109%	2.3%
4.0 (5.0)	3.0 (3.0)	30	**20AB-DB1-C**	62	0.040	0.8	60%	60%	3.3%	N/A	N/A
5.5 (7.5)	4.0 (5.0)	21	**20AB-DB1-D**	22	0.036	0.9	117%	100%	1.3%	117%	1.1%
7.5 (10)	5.5 (7.5)	21	**20AB-DB1-D**	22	0.036	0.9	86%	86%	1.1%	N/A	N/A
400…480 Volt AC Input Drives											
0.37 (0.5)	0.25 (0.33)	68	**20AD-DB1-A**	115	0.048	8.3	320%	100%	25.9%	150%	17.3%
0.75 (1.0)	0.55 (0.75)	68	**20AD-DB1-A**	115	0.048	9.0	259%	100%	12.8%	150%	8.5%
1.5 (2.0)	1.1 (1.5)	68	**20AD-DB1-A**	115	0.048	2.4	243%	100%	6.4%	150%	4.3%
2.2 (3.0)	1.5 (2.0)	68	**20AD-DB1-B**	115	0.028	0.9	206%	100%	2.5%	150%	1.7%
4.0 (5.0)	3.0 (3.0)	68	**20AD-DB1-B**	115	0.028	0.9	129%	100%	1.4%	129%	1.1%
5.5 (7.5)	4.0 (5.0)	74	**20AD-DB1-C**	115	0.04	0.9	94%	94%	1.5%	N/A	N/A
7.5 (10)	5.5 (7.5)	74	**20AD-DB1-C**	115	0.04	0.9	69%	69%	1.5%	N/A	N/A
11 (15)	7.5 (10)	44	**20AD-DB1-D**	62	0.036	0.8	87%	87%	0.8%	N/A	N/A
15 (20)	11 (15)	31	**20AD-DB1-D**	62	0.036	0.8	64%	64%	0.8%	N/A	N/A
500…600 Volt AC Input Drives											
0.37 (0.5)	0.25 (0.33)	117	**20AD-DB1-A**	115	0.048	8.3	287%	100%	25.9%	150%	17.3%
0.75 (1.0)	0.55 (0.75)	117	**20AD-DB1-A**	115	0.048	9.0	263%	100%	12.8%	150%	8.5%
1.5 (2.0)	1.1 (1.5)	117	**20AD-DB1-A**	115	0.048	2.4	243%	100%	6.4%	150%	4.3%
2.2 (3.0)	1.5 (2.0)	117	**20AD-DB1-B**	115	0.028	0.9	202%	100%	2.5%	150%	1.7%
4.0 (5.0)	3.0 (3.0)	80	**20AD-DB1-B**	115	0.028	0.9	193%	100%	1.4%	150%	0.9%
5.5 (7.5)	4.0 (5.0)	80	**20AD-DB1-C**	115	0.04	0.9	147%	100%	1.5%	147%	1.0%
7.5 (10)	5.5 (7.5)	80	**20AD-DB1-C**	115	0.04	0.9	108%	100%	1.1%	108%	1.0%
11 (15)	7.5 (10)	48	**N/A**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15 (20)	11 (15)	48	**N/A**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

★ Duty cycle listed is based on full speed to zero speed deceleration. For constant regen at full speed, duty cycle capability is half of what is listed. Application Type 1 represents maximum capability up to 100% braking torque where possible. Application Type 2 represents more than 100% braking torque where possible, up to a maximum of 150%.

‡ Always check resistor Ohms against minimum resistance for drive being used.

PowerFlex 70 Medium Duty External Dynamic Brake Resistors

These resistors provide a larger duty cycle capability than the internal type. Includes an internal thermal switch for use in external safety circuit.

PowerFlex 70 AC Drive			Medium Duty External DB Resistor								
								Application Type 1		Application Type 2	
Normal Duty★ *kW (Hp)*	Heavy Duty★ *kW (Hp)*	Min DB Res *Ohms ±10%*	Cat. No.	Resistance ‡ *Ohms ±5%*	Continuous Power *kW*	Max Energy *kJ*	Max Braking Torque *% of ND Motor*	Braking Torque *% of ND Motor*	Duty Cycle	Braking Torque *% of ND Motor*	Duty Cycle
200…240 Volt AC Input Drives											
0.37 (0.5)	0.25 (0.33)	33	**AK-R2-091P500**	91	0.086	17	293%	100%	46%	150%	31%
0.75 (1.0)	0.55 (0.75)	33	**AK-R2-091P500**	91	0.086	17	218%	100%	23%	150%	15%
1.5 (2.0)	1.1 (1.5)	33	**AK-R2-091P500**	91	0.086	17	109%	100%	11%	109%	11%
2.2 (3.0)	1.5 (2.0)	33	**AK-R2-047P500**	47	0.166	33	144%	100%	15%	144%	11%
4.0 (5.0)	3.0 (3.0)	30	**AK-R2-047P500**	47	0.166	33	79%	79%	11%	N/A	N/A
5.5 (7.5)	4.0 (5.0)	23	**AK-R2-030P1K2**	30	0.26	52	90%	90%	10%	N/A	N/A
7.5 (10)	5.5 (7.5)	23	**AK-R2-030P1K2**	30	0.26	52	66%	66%	10%	N/A	N/A
400…480 Volt AC Input Drives											
0.37 (0.5)	0.25 (0.33)	68	**AK-R2-360P500**	360	0.086	17	305%	100%	47%	150%	31%
0.75 (1.0)	0.55 (0.75)	68	**AK-R2-360P500**	360	0.086	17	220%	100%	23%	150%	15%
1.5 (2.0)	1.1 (1.5)	68	**AK-R2-360P500**	360	0.086	17	110%	100%	12%	110%	11%
2.2 (3.0)	1.5 (2.0)	68	**AK-R2-120P1K2**	120	0.26	52	197%	100%	24%	150%	16%
4.0 (5.0)	3.0 (3.0)	68	**AK-R2-120P1K2**	120	0.26	52	124%	100%	13%	124%	10%
5.5 (7.5)	4.0 (5.0)	74	**AK-R2-120P1K2**	120	0.26	52	90%	90%	10%	N/A	N/A
7.5 (10)	5.5 (7.5)	74	**AK-R2-120P1K2**	120	0.26	52	66%	66%	10%	N/A	N/A
11 (15) §	7.5 (10) §	44	**§**	60	0.52	104	90%	90%	10%	N/A	N/A
15 (20) §	11 (15) §	31	**§**	60	0.52	104	66%	66%	10%	N/A	N/A
500…600 Volt AC Input Drives											
0.37 (0.5)	0.25 (0.33)	117	**AK-R2-360P500**	360	0.086	17	274%	100%	46%	150%	31%
0.75 (1.0)	0.55 (0.75)	117	**AK-R2-360P500**	360	0.086	17	251%	100%	23%	150%	15%
1.5 (2.0)	1.1 (1.5)	117	**AK-R2-360P500**	360	0.086	17	172%	100%	11%	150%	8%
2.2 (3.0)	1.5 (2.0)	117	**AK-R2-120P1K2**	120	0.26	52	193%	100%	24%	150%	16%
4.0 (5.0)	3.0 (3.0)	80	**AK-R2-120P1K2**	120	0.26	52	185%	100%	13%	150%	9%
5.5 (7.5)	4.0 (5.0)	80	**AK-R2-120P1K2**	120	0.26	52	141%	100%	9%	141%	7%
7.5 (10)	5.5 (7.5)	80	**AK-R2-120P1K2**	120	0.26	52	103%	100%	7%	103%	7%
11 (15) §	7.5 (10) §	48	**§**	60	0.52	104	141%	100%	9%	141%	7%
15 (20) §	11 (15) §	48	**§**	60	0.52	104	103%	100%	7%	103%	7%

★ Duty cycle listed is based on full speed to zero speed deceleration. For constant regen at full speed, duty cycle capability is half of what is listed. Application Type 1 represents maximum capability up to 100% braking torque where possible. Application Type 2 represents more than 100% braking torque where possible, up to a maximum of 150%.

‡ Always check resistor Ohms against minimum resistance for drive being used.

§ For 11 and 15 kW (15 and 20 Hp) applications, use two 7.5 kW (10 Hp) size resistors wired in parallel.

Internal Dynamic Brake Resistor Kits

These resistors have a limited duty cycle. Refer to the PowerFlex Dynamic Braking Selection Guide to determine if an internal resistor will be sufficient for your application. An external resistor may be required.

Drive Input Voltage	Brake Resistance Ω	Frame	Cat. No.	Used with PowerFlex Drive					
				70	700	700H	700S	700L	753/755
208…240V AC	62	0	**20BB-DB1-0**		✓		✓		
	62	1 (except 7.5 Hp)	**20BB-DB1-1**		✓		✓		
	22	1 (7.5 Hp)	**20BB-DB2-1**		✓		✓		
	22	2	**20BB-DB1-2**		✓		✓		
380…600V AC	115	0	**20BD-DB1-0**		✓		✓		
	115	1	**20BD-DB1-1**		✓		✓		
	68	2	**20BD-DB1-2**		✓		✓		
	63	1 (1…3 Hp)	**20-750-DB1-D1**						✓
	115	1 (5…10 Hp)	**20-750-DB1-D1A**						✓
	62	2	**20-750-DB1-D2**						✓

Terminators

Description ‡	Cat. No.	Used with PowerFlex Drive					
		70	700	700H	700S	700L	753/755
for use with 3.7 kW (5 Hp) & below drives	**1204-TFA1**	✓	✓		✓	✓	✓
for use with 1.5 kW (2 Hp) & up drives	**1204-TFB2**	✓	✓	✓	✓	✓	✓

‡ Refer to Appendix A of publication Drives-IN001 for selection information.

Reflected Wave Reduction Modules w/Common Mode Choke

Description ‡	Cat. No.	Used with PowerFlex Drive					
		70	700	700H	700S	700L	753/755
17A with Common Mode Choke	**1204-RWC-17-A**	✓	✓	✓	✓		✓

‡ Refer to Appendix A of publication Drives-IN001 for selection information.

Reflected Wave Reduction Modules

Voltage	ND kW	ND Hp	Cat. No.	Used with PowerFlex Drive					
				70	700	700H	700S	700L	753/755
380…480V AC	4	5	1321-RWR8-DP	✓	✓		✓		✓
	5.5	7.5	1321-RWR12-DP	✓	✓		✓		✓
	7.5	10	1321-RWR18-DP	✓	✓		✓		✓
	11	15	1321-RWR25-DP	✓	✓		✓		✓
	15	20	1321-RWR35-DP	✓	✓		✓		✓
	18.5	25	1321-RWR35-DP	✓	✓		✓		✓
	22	30	1321-RWR45-DP	✓	✓		✓		✓
	30	40	1321-RWR55-DP	✓	✓		✓		✓
	37	50	1321-RWR80-DP	✓	✓		✓		✓
	45	60	1321-RWR80-DP		✓		✓		✓
	55	75	1321-RWR100-DP		✓		✓		✓
	75	100	1321-RWR130-DP		✓		✓		✓
			1321-RWR160-DP				✓		
	90	125	1321-RWR160-DP		✓		✓		✓
	110	150	1321-RWR200-DP		✓		✓		✓
	149	200	1321-RWR250-DP		✓	✓	✓		✓
			1321-RWR320-DP				✓		
	187	250	1321-RWR320-DP		✓	✓	✓		✓
500…600V AC	4	5	1321-RWR8-EP	✓	✓		✓		✓
	5.5	7.5	1321-RWR8-EP				✓		
			1321-RWR12-EP	✓	✓				✓
	7.5	10	1321-RWR12-EP	✓	✓		✓		
			1321-RWR18-EP						✓
	11	15	1321-RWR18-EP	✓	✓		✓		
			1321-RWR25-EP						✓
	15	20	1321-RWR25-EP	✓	✓		✓		
			1321-RWR35-EP						✓
	18.5	25	1321-RWR25-EP				✓		
			1321-RWR35-EP	✓	✓				✓
	22	30	1321-RWR35-EP	✓	✓		✓		
			1321-RWR45-EP						✓
	30	40	1321-RWR45-EP	✓	✓		✓		
			1321-RWR55-EP						✓
	37	50	1321-RWR55-EP	✓	✓		✓		
			1321-RWR80-EP						✓
	45	60	1321-RWR80-EP		✓		✓		✓
	55	75	1321-RWR80-EP		✓		✓		
			1321-RWR100-EP						✓
	75	100	1321-RWR100-EP		✓		✓		
			1321-RWR130-EP						✓
	90	125	1321-RWR130-EP		✓		✓		
			1321-RWR160-EP						✓
	110	150	1321-RWR160-EP		✓		✓		
			1321-RWR200-EP				✓		✓
	149	200	1321-RWR200-EP				✓		
			1321-RWR250-EP						✓

1492 Wiring System Modules and Cables

Wiring System Modules and Cables provide an easy means to extend drive control wiring. A pre-wired cable (available in various lengths) plugs into the appropriate drive I/O terminal block. The remaining cable end plugs into the Wiring Module which provides a terminal block for direct I/O connection. See publication 1492-TD008 for detailed information.

1492 Wiring Module and Cable Selection

Drive I/O	Wiring Module Description	Wiring Module Cat. No.		PowerFlex 700H Cable (see below)	PowerFlex 700S Cable (see below)	Used with PowerFlex Drive					
		Fixed Terminal Block	Removable Terminal Block			70	700	700H	700S	700L	753/755
Analog I/O (TB1)	6 Channel Isolated - 3 Terminals/Ch.	**1492-AIFM6S-3**	**1492-RAIFM6S-3**	**1492-ACABxxxZ7H**	**1492-ACABxxxZ7S**			✓	✓		
DC Discrete Digital I/O (TB2)	Standard, 264V AC/DC	**1492-IFM20F**	**1492-RIFM20F**	**1492-CABxxxA7H**	**1492-CABxxxA7S**			✓	✓		
	Narrow Standard, 132V AC/DC	**1492-IFM20FN**	**1492-RIFM20FN**	**1492-CABxxxA7H**	**1492-CABxxxA7S**			✓	✓		
	Extra Terminals (2 per I/O), 264V AC/DC	**1492-IFM20F-2**	**1492-RIFM20F-2**	**1492-CABxxxA7H**	**1492-CABxxxA7S**			✓	✓		
AC Discrete Digital I/O (20C-DA1-B & 20C-DO1)	Standard, 264V AC/DC	**1492-IFM20F**	**1492-RIFM20F**	**1492-CABxxxB7H**	**1492-CABxxxB7H**			✓			
	Narrow Standard, 132V AC/DC	**1492-IFM20FN**	**1492-RIFM20FN**	**1492-CABxxxB7H**	**1492-CABxxxB7H**			✓			
	Extra Terminals (2 per I/O), 264V AC/DC	**1492-IFM20F-2**	**1492-RIFM20F-2**	**1492-CABxxxB7H**	**1492-CABxxxB7H**			✓			
Encoder	2 Channel Encoder Input - 4 Outputs	**1492-AIFMCE4**	–	**1492-ACABxxxX7S**	**1492-ACABxxxX7S**				✓		
	2 Channel Fused Encoder Input - 4 Fused Outputs	**1492-AIFMCE4-F**	–	**1492-ACABxxxX7S**	**1492-ACABxxxX7S**				✓		

1492 Pre-Wired Cable Assemblies

Description	PowerFlex 700H Cat. No.	PowerFlex 700S Cat. No.	Used with PowerFlex Drive					
			70	700	700H	700S	700L	753/755
Pre-Wired Cable for Analog I/O								
0.5 Meter (1.6 Feet)	**1492-ACAB005Z7H**	1492-ACAB005Z7S			✓	✓		
1.0 Meter (3.3 Feet)	**1492-ACAB010Z7H**	1492-ACAB010Z7S			✓	✓		
2.5 Meters (8.2 Feet)	**1492-ACAB025Z7H**	1492-ACAB025Z7S			✓	✓		
5.0 Meters (16.4 Feet)	**1492-ACAB050Z7H**	1492-ACAB050Z7S			✓	✓		
Pre-Wired Cable for Discrete DC I/O								
0.5 Meter (1.6 Feet)	**1492-CAB005A7H**	1492-CAB005A7S			✓	✓		
1.0 Meter (3.3 Feet)	**1492-CAB010A7H**	1492-CAB005A7S			✓	✓		
2.5 Meters (8.2 Feet)	**1492-CAB025A7H**	1492-CAB025A7S			✓	✓		
5.0 Meters (16.4 Feet)	**1492-CAB050A7H**	1492-CAB050A7S			✓	✓		
Pre-Wired Cable for Discrete AC I/O								
0.5 Meter (1.6 Feet)	**1492-CAB005B7H**	–			✓			
1.0 Meter (3.3 Feet)	**1492-CAB010B7H**	–			✓			
2.5 Meters (8.2 Feet)	**1492-CAB025B7H**	–			✓			
5.0 Meters (16.4 Feet)	**1492-CAB050B7H**	–			✓			
Pre-Wired Cable for Encoder								
0.5 Meter (1.6 Feet)	–	1492-ACAB005X7S				✓		
1.0 Meter (3.3 Feet)	–	1492-ACAB010X7S				✓		
2.5 Meters (8.2 Feet)	–	1492-ACAB025X7S				✓		
5.0 Meters (16.4 Feet)	–	1492-ACAB050X7S				✓		

Isolation Transformers - IP32, NEMA/UL Type 3R Standalone, 4…6% Nominal Impedance

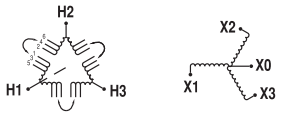


Diagram 1

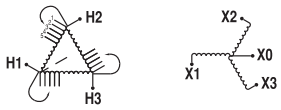


Diagram 2

Motor Rating		Wiring	240V, 60 Hz, Three-Phase Primary & 240V Secondary ★	460V, 60 Hz, Three-Phase Primary & 460V Secondary	575V, 60 Hz, Three-Phase Primary & 575V Secondary ★	Used with PowerFlex Drive					
kW	Hp	Diagram	Cat. No.	Cat. No.	Cat. No.	70	700	700H	700S	700L	753/755
0.25	0.33	1	1321-3TW005-AA	1321-3TW005-BB	–	✓	✓		✓		
0.37	0.5	1	1321-3TW005-AA	1321-3TW005-BB	1321-3TW005-CC	✓	✓		✓		
0.55	0.75	1	1321-3TW005-AA	1321-3TW005-BB	–	✓	✓		✓		
0.75	1	1	1321-3TW005-AA	1321-3TW005-BB	1321-3TW005-CC	✓	✓		✓		✓
1.1	1.5	1	1321-3TW005-AA	1321-3TW005-BB	–	✓	✓		✓		
1.5	2	1	1321-3TW005-AA	1321-3TW005-BB	1321-3TW005-CC	✓	✓		✓		✓
2.2	3	1	1321-3TW005-AA	1321-3TW005-BB	1321-3TW005-CC	✓	✓		✓		✓
22	30	2	1321-3TW040-AA	1321-3TW040-BB	1321-3TW040-CC	✓	✓		✓		✓
30	40	2	1321-3TW051-AA	1321-3TW051-BB	1321-3TW051-CC	✓	✓		✓		✓
37	50	2	1321-3TH063-AA	1321-3TH063-BB	1321-3TH063-CC	✓	✓		✓		✓
45	60	2	1321-3TH075-AA	1321-3TH075-BB	1321-3TH075-CC		✓		✓		✓
55	75	2	1321-3TH093-AA	1321-3TH093-BB	1321-3TH093-CC		✓		✓		✓
75	100	2	–	1321-3TH118-BB	1321-3TH118-CC		✓		✓		✓
90	125	2	–	1321-3TH145-BB	1321-3TH145-CC		✓		✓		✓
110	150	2	–	1321-3TH175-BB	1321-3TH175-CC		✓	✓	✓		✓
149	200	2	–	1321-3TH220-BB	1321-3TH220-CC		✓	✓	✓		✓
187	250	2	–	1321-3TH275-BB	1321-3TH275-CC		✓	✓			✓
224	300	2	–	1321-3TH330-BB	1321-3TH330-CC		✓	✓			✓
224	300	1	–	–	1321-3TH330-CC						✓
261	350	1	–	1321-3TH440-BB	1321-3TH440-CC		✓	✓			✓
298	400	1	–	1321-3TH440-BB	1321-3TH440-CC		✓	✓			
298	400	1	–	1321-3TH440-BB	1321-3TH550-CC						✓
336	450	1	–	1321-3TH550-BB	1321-3TH550-CC		✓	✓			✓
373	500	1	–	1321-3TH550-BB	1321-3TH550-CC		✓	✓			
373	500	1	–	1321-3TH550-BB	1321-3TH660-CC						✓
410	550	1	–	–	1321-3TH660-CC						✓
448	600	1	–	1321-3TH660-BB	1321-3TH660-CC		✓	✓			
448	600	1	–	1321-3TH660-BB	1321-3TH770-CC						✓
485	650	1	–	–	1321-3TH770-CC		✓	✓			
522	700	1	–	1321-3TH770-BB	1321-3TH770-CC		✓	✓			✓
597	800	1	–	1321-3TH880-BB	1321-3TH880-CC						✓
671	900	–	–	900 kVA ‡	950 kVA ‡						✓
709	950	–	–	–	1000 kVA ‡						✓
746	1000	–	–	1000 kVA ‡	1100 kVA ‡						✓
821	1100	–	–	1200 kVA ‡	–						✓
895	1200	–	–	–	1200 kVA ‡						✓
933	1250	–	–	1200 kVA ‡	–						✓
1007	1350	–	–	1300 kVA ‡	–						✓
1119	1500	–	–	1500 kVA ‡	1500 kVA ‡						✓
1492	2000	–	–	2000 kVA ‡	–						✓

★ Not applicable for the PowerFlex 755.

‡ 1321 Isolation Transformer solution is not available. Approximate drive kVA is listed.

Input and Output Reactors - 200…240V, 50/60 Hz, Three-Phase, 3% Impedance

			Input Line Reactor ‡		Output Reactor ‡		Used with PowerFlex Drive					
kW	Hp	Duty	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	700	700H	700S	700L	753/755
0.25	0.33	Heavy	1321-3R2-D	1321-3RA2-D	1321-3R2-D	1321-3RA2-D	✓	✓		✓		
0.37	0.5	Normal	1321-3R2-D	1321-3RA2-D	1321-3R2-D	1321-3RA2-D	✓	✓		✓		
0.55	0.75	Heavy	1321-3R4-A	1321-3RA4-A	1321-3R4-A	1321-3RA4-A	✓	✓		✓		
0.75	1	Normal	1321-3R4-A	1321-3RA4-A	1321-3R4-A	1321-3RA4-A	✓	✓		✓		
1.1	1.5	Heavy	1321-3R8-B	1321-3RA8-B	1321-3R8-A	1321-3RA8-A	✓	✓		✓		
1.5	2	Normal	1321-3R8-A	1321-3RA8-A	1321-3R8-A	1321-3RA8-A	✓	✓		✓		
		Heavy	1321-3R8-A	1321-3RA8-A	1321-3R12-A	1321-3RA12-A	✓	✓		✓		
2.2	3	Normal	1321-3R12-A	1321-3RA12-A	1321-3R12-A	1321-3RA12-A	✓	✓		✓		
		Heavy	1321-3R12-A	1321-3RA12-A	1321-3R18-A	1321-3RA18-A	✓	✓		✓		
4	5	Normal	1321-3R18-A	1321-3RA18-A	1321-3R18-A	1321-3RA18-A	✓	✓		✓		
		Heavy	1321-3R18-A	1321-3RA18-A	1321-3R25-A	1321-3RA25-A	✓	✓		✓		
5.5	7.5	Normal	1321-3R25-A	1321-3RA25-A	1321-3R25-A	1321-3RA25-A	✓	✓		✓		
		Heavy	1321-3R25-A	1321-3RA25-A	1321-3R35-A	1321-3RA35-A	✓	✓		✓		
7.5	10	Normal	1321-3R35-A	1321-3RA35-A	1321-3R35-A	1321-3RA35-A	✓	✓		✓		
		Heavy	1321-3R35-A	1321-3RA35-A	1321-3R45-A	1321-3RA45-A	✓	✓		✓		
11	15	Normal	1321-3R45-A	1321-3RA45-A	1321-3R45-A	1321-3RA45-A	✓	✓		✓		
		Heavy	1321-3R45-A	1321-3RA45-A	1321-3R55-A	1321-3RA55-A	✓	✓		✓		
15	20	Normal	1321-3R55-A	1321-3RA55-A	1321-3R55-A	1321-3RA55-A	✓	✓		✓		
		Heavy	1321-3R55-A	1321-3RA55-A	1321-3R80-A	1321-3RA80-A	✓	✓		✓		
18.5	25	Normal	1321-3R80-A	1321-3RA80-A	1321-3R80-A	1321-3RA80-A	✓	✓		✓		
		Heavy	1321-3R80-A	1321-3RA80-A	1321-3R80-A	1321-3RA80-A		✓		✓		
22	30	Normal	1321-3R80-A	1321-3RA80-A	1321-3R80-A	1321-3RA80-A		✓		✓		
		Heavy	1321-3R80-A	1321-3RA80-A	1321-3R80-A	1321-3RA80-A		✓		✓		
30	40	Normal	1321-3R100-A	1321-3RA100-A	1321-3R100-A	1321-3RA100-A		✓		✓		
		Heavy	1321-3R100-A	1321-3RA100-A	1321-3R100-A	1321-3RA100-A		✓		✓		
37	50	Normal	1321-3R130-A	1321-3RA130-A	1321-3R130-A	1321-3RA130-A		✓		✓		
		Heavy	1321-3R130-A	1321-3RA130-A	1321-3R130-A	1321-3RA130-A		✓		✓		
45	60	Normal	1321-3R160-A	1321-3RA160-A	1321-3R160-A	1321-3RA160-A		✓		✓		
		Heavy	1321-3R160-A	1321-3RA160-A	1321-3R160-A	1321-3RA160-A		✓		✓		
55	75	Normal	1321-3R200-A	1321-3RA200-A	1321-3R200-A	1321-3RA200-A		✓		✓		
		Heavy	1321-3R200-A	1321-3RA200-A	1321-3R200-A	1321-3RA200-A		✓		✓		
75	100	Normal	1321-3RB250-A	1321-3RAB250-A	1321-3RB250-A	1321-3RAB250-A		✓		✓		

‡ Input line reactors were sized based on the NEC fundamental motor amps. Output line reactors were sized based on the VFD rated output currents.

Input and Output Reactors - 200…240V, 50/60 Hz, Three-Phase, 5% Impedance

kW	Hp	Duty	Input Line Reactor ‡		Output Reactor ‡		Used with PowerFlex Drive					
			IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	700	700H	700S	700L	753/755
0.25	0.33	Heavy	1321-3R2-A	1321-3RA2-A	1321-3R2-A	1321-3RA2-A	✓	✓		✓		
0.37	0.5	Normal	1321-3R2-A	1321-3RA2-A	1321-3R2-A	1321-3RA2-A	✓	✓		✓		
0.55	0.75	Heavy	1321-3R4-B	1321-3RA4-B	1321-3R4-B	1321-3RA4-B	✓	✓		✓		
0.75	1	Normal	1321-3R4-B	1321-3RA4-B	1321-3R4-B	1321-3RA4-B	✓	✓		✓		
1.1	1.5	Heavy	1321-3R8-B	1321-3RA8-B	1321-3R8-B	1321-3RA8-B	✓	✓		✓		
1.5	2	Normal	1321-3R8-B	1321-3RA8-B	1321-3R8-B	1321-3RA8-B	✓	✓		✓		
		Heavy	1321-3R8-B	1321-3RA8-B	1321-3R12-B	1321-3RA12-B	✓	✓		✓		
2.2	3	Normal	1321-3R12-B	1321-3RA12-B	1321-3R12-B	1321-3RA12-B	✓	✓		✓		
		Heavy	1321-3R12-B	1321-3RA12-B	1321-3R18-B	1321-3RA18-B	✓	✓		✓		
4	5	Normal	1321-3R18-B	1321-3RA18-B	1321-3R18-B	1321-3RA18-B	✓	✓		✓		
		Heavy	1321-3R18-B	1321-3RA18-B	1321-3R25-B	1321-3RA25-B	✓	✓		✓		
5.5	7.5	Normal	1321-3R25-B	1321-3RA25-B	1321-3R25-B	1321-3RA25-B	✓	✓		✓		
		Heavy	1321-3R25-B	1321-3RA25-B	1321-3R35-B	1321-3RA35-B	✓	✓		✓		
7.5	10	Normal	1321-3R35-B	1321-3RA35-B	1321-3R35-B	1321-3RA35-B	✓	✓		✓		
		Heavy	1321-3R35-B	1321-3RA35-B	1321-3R45-B	1321-3RA45-B	✓	✓		✓		
11	15	Normal	1321-3R45-B	1321-3RA45-B	1321-3R45-B	1321-3RA45-B	✓	✓		✓		
		Heavy	1321-3R45-B	1321-3RA45-B	1321-3R55-B	1321-3RA55-B	✓	✓		✓		
15	20	Normal	1321-3R55-B	1321-3RA55-B	1321-3R55-B	1321-3RA55-B	✓	✓		✓		
		Heavy	1321-3R55-B	1321-3RA55-B	1321-3R80-B	1321-3RA80-B	✓	✓		✓		
18.5	25	Normal	1321-3R80-B	1321-3RA80-B	1321-3R80-B	1321-3RA80-B		✓		✓		
		Heavy	1321-3R80-B	1321-3RA80-B	1321-3R80-B	1321-3RA80-B		✓		✓		
22	30	Normal	1321-3R80-B	1321-3RA80-B	1321-3R80-B	1321-3RA80-B		✓		✓		
		Heavy	1321-3R80-B	1321-3RA80-B	1321-3R80-B	1321-3RA80-B		✓		✓		
30	40	Normal	1321-3R100-B	1321-3RA100-B	1321-3R100-B	1321-3RA100-B		✓		✓		
		Heavy	1321-3R100-B	1321-3RA100-B	1321-3R100-B	1321-3RA100-B		✓		✓		
37	50	Normal	1321-3R130-B	1321-3RA130-B	1321-3R130-B	1321-3RA130-B		✓		✓		
		Heavy	1321-3R130-B	1321-3RA130-B	1321-3R130-B	1321-3RA130-B		✓		✓		
45	60	Normal	1321-3R160-B	1321-3RA160-B	1321-3R160-B	1321-3RA160-B		✓		✓		
		Heavy	1321-3R160-B	1321-3RA160-B	1321-3R160-B	1321-3RA160-B		✓		✓		
55	75	Normal	1321-3R200-B	1321-3RA200-B	1321-3R200-B	1321-3RA200-B		✓		✓		
		Heavy	1321-3R200-B	1321-3RA200-B	1321-3R200-B	1321-3RA200-B		✓		✓		
75	100	Normal	1321-3RB250-B	1321-3RAB250-B	1321-3RB250-B	1321-3RAB250-B		✓		✓		

‡ Input line reactors were sized based on the NEC fundamental motor amps. Output line reactors were sized based on the VFD rated output currents.

Input and Output Reactors - 380…480V, 50/60 Hz, Three-Phase, 3% Impedance

kW	Hp	Duty	Input Line Reactor ‡		Output Reactor ‡		Used with PowerFlex Drive					
			IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	700	700H	700S	700L	753/755
0.25	0.33	Heavy	1321-3R1-C	1321-3RA1-C	1321-3R2-B	1321-3RA2-B	✓	✓		✓		
0.37	0.5	Normal	1321-3R1-C	1321-3RA1-C	1321-3R2-B	1321-3RA2-B	✓	✓		✓		
0.55	0.75	Heavy	1321-3R2-A	1321-3RA2-A	1321-3R2-A	1321-3RA2-A	✓	✓		✓		
0.75	1	Normal	1321-3R2-A	1321-3RA2-A	1321-3R2-A	1321-3RA2-A	✓	✓		✓		✓
1.1	1.5	Heavy	1321-3R4-C	1321-3RA4-C	1321-3R4-B	1321-3RA4-B	✓	✓		✓		✓
1.5	2	Normal	1321-3R4-B	1321-3RA4-B	1321-3R4-B	1321-3RA4-B	✓	✓		✓		✓
		Heavy	1321-3R4-B	1321-3RA4-B	1321-3R8-C	1321-3RA8-C	✓	✓		✓		✓
2.2	3	Normal	1321-3R8-C	1321-3RA8-C	1321-3R8-C	1321-3RA8-C	✓	✓		✓		✓
		Heavy	1321-3R8-C	1321-3RA8-C	1321-3R8-B	1321-3RA8-B	✓	✓		✓		✓
4	5	Normal	1321-3R8-B	1321-3RA8-B	1321-3R8-B	1321-3RA8-B	✓	✓		✓		✓
		Heavy	1321-3R8-B	1321-3RA8-B	1321-3R12-B	1321-3RA12-B	✓	✓		✓		✓
5.5	7.5	Normal	1321-3R12-B	1321-3RA12-B	1321-3R12-B	1321-3RA12-B	✓	✓		✓		✓
		Heavy	1321-3R12-B	1321-3RA12-B	1321-3R18-B	1321-3RA18-B	✓	✓		✓		✓
7.5	10	Normal	1321-3R18-B	1321-3RA18-B	1321-3R18-B	1321-3RA18-B	✓	✓		✓		✓
		Heavy	1321-3R18-B	1321-3RA18-B	1321-3R25-B	1321-3RA25-B	✓	✓		✓		✓
11	15	Normal	1321-3R25-B	1321-3RA25-B	1321-3R25-B	1321-3RA25-B	✓	✓		✓		✓
		Heavy	1321-3R25-B	1321-3RA25-B	1321-3R25-B	1321-3RA25-B	✓	✓		✓		✓
15	20	Normal	1321-3R35-B	1321-3RA35-B	1321-3R25-B	1321-3RA25-B	✓	✓		✓		✓
		Heavy	1321-3R35-B	1321-3RA35-B	1321-3R35-B	1321-3RA35-B	✓	✓		✓		✓
18.5	25	Normal	1321-3R35-B	1321-3RA35-B	1321-3R35-B	1321-3RA35-B	✓	✓		✓		✓
		Heavy	1321-3R35-B	1321-3RA35-B	1321-3R45-B	1321-3RA45-B	✓	✓		✓		✓
22	30	Normal	1321-3R45-B	1321-3RA45-B	1321-3R45-B	1321-3RA45-B	✓	✓		✓		✓
		Heavy	1321-3R45-B	1321-3RA45-B	1321-3R55-B	1321-3RA55-B	✓	✓		✓		✓
30	40	Normal	1321-3R55-B	1321-3RA55-B	1321-3R55-B	1321-3RA55-B	✓	✓		✓		✓
		Heavy	1321-3R55-B	1321-3RA55-B	1321-3R80-B	1321-3RA80-B	✓	✓		✓		✓
37	50	Normal	1321-3R80-B	1321-3RA80-B	1321-3R80-B	1321-3RA80-B	✓	✓		✓		✓
		Heavy	1321-3R80-B	1321-3RA80-B	1321-3R80-B	1321-3RA80-B		✓		✓		✓
45	60	Normal/Heavy	1321-3R80-B	1321-3RA80-B	1321-3R80-B	1321-3RA80-B		✓		✓		✓
55	75	Normal/Heavy	1321-3R100-B	1321-3RA100-B	1321-3R100-B	1321-3RA100-B		✓		✓		✓
75	100	Normal/Heavy	1321-3R130-B	1321-3RA130-B	1321-3R130-B	1321-3RA130-B		✓		✓		✓
90	125	Normal/Heavy	1321-3R160-B	1321-3RA160-B	1321-3R160-B	1321-3RA160-B		✓		✓		✓
110	150	Normal	1321-3R200-B	1321-3RA200-B	1321-3R200-C	1321-3RA200-C		✓	✓	✓		✓
		Heavy	1321-3R200-B	1321-3RA200-B	1321-3R200-C	1321-3RA200-C		✓		✓		✓
		Heavy	–	–	1321-3R200-B	1321-3RA200-B			✓			
–	200	Normal/Heavy	1321-3RB250-B	1321-3RAB250-B	1321-3RB250-B	1321-3RAB250-B						✓
132	–	Normal/Heavy	1321-3RB250-B	1321-3RAB250-B	1321-3RB250-B	1321-3RAB250-B						✓
149	200	Normal	1321-3RB250-B	1321-3RAB250-B	1321-3RB250-B	1321-3RAB250-B		✓	✓	✓		
		Heavy	1321-3RB250-B	1321-3RAB250-B	1321-3RB250-B	1321-3RAB250-B		✓	✓	✓		
160	250	Normal/Heavy	1321-3RB320-B	1321-3RAB320-B	1321-3RB320-B	1321-3RAB320-B						✓
187	250	Normal/Heavy	1321-3RB320-B	1321-3RAB320-B	1321-3RB320-B	1321-3RAB320-B		✓	✓			
200	300	Normal	1321-3RB400-B	1321-3RAB400-B	1321-3RB400-B	1321-3RAB400-B		✓	✓			✓
		Heavy	1321-3RB400-B	1321-3RAB400-B	1321-3RB400-B	1321-3RAB400-B		✓	✓			✓
–	350	Normal/Heavy	1321-3R500-B	1321-3R500-B	1321-3R500-B	1321-3R500-B						✓
250	–	Normal/Heavy	1321-3R500-B	1321-3RA500-B	1321-3R500-B	1321-3RA500-B						✓
261	350	Normal	1321-3RB400-B	1321-3RAB400-B	1321-3RB400-B	1321-3RAB400-B		✓				
		Heavy	1321-3RB400-B	1321-3RAB400-B	1321-3RB400-B	1321-3RAB400-B		✓	✓			
		Normal	–	–	1321-3R500-B	1321-3RA500-B			✓			

continued

‡ Input line reactors were sized based on the NEC fundamental motor amps (PowerFlex 700H has an integral input reactor). Output line reactors were sized based on the VFD rated output currents.

Input and Output Reactors - 380…480V, 50/60 Hz, Three-Phase, 3% Impedance (continued)

			Input Line Reactor ‡		Output Reactor ‡		Used with PowerFlex Drive					
kW	Hp	Duty ♦	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	700	700H	700S	700L	753/755
–	400	Light/Normal/Heavy	**1321-3R500-B**	**1321-3RA500-B**	**1321-3R500-B**	**1321-3RA500-B**						✓
280	400	Normal/Heavy	**1321-3R500-B**	**1321-3RA500-B**	**1321-3R500-B**	**1321-3RA500-B**		✓				
315	–	Light/Normal/Heavy	**1321-3R600-B**	**1321-3RA600-B**	**1321-3R600-B**	**1321-3RA600-B**						✓
–	450	Light/Normal/Heavy	**1321-3R600-B**	**1321-3RA600-B**	**1321-3R600-B**	**1321-3RA600-B**						✓
336	450	Normal/Heavy	**1321-3R500-B**	**1321-3RA500-B**	**1321-3R500-B**	**1321-3RA500-B**		✓	✓			
355	–	Light/Normal/Heavy	**1321-3R750-B**	**1321-3RA750-B**	**1321-3R750-B**	**1321-3RA750-B**						✓
–	500	Light	**1321-3R600-B**	**1321-3RA600-B**	**1321-3R600-B**	**1321-3RA600-B**						✓
		Normal/Heavy	**1321-3R750-B**	**1321-3RA750-B**	**1321-3R750-B**	**1321-3RA750-B**						✓
373	500	Normal/Heavy	**1321-3R600-B**	**1321-3RA600-B**	**1321-3R600-B**	**1321-3RA600-B**		✓	✓			
400	–	Light/Heavy	**1321-3R750-B**	**1321-3RA750-B**	**1321-3R750-B**	**1321-3RA750-B**						✓
		Normal	**1321-3R850-B**	**1321-3RA850-B**	**1321-3R850-B**	**1321-3RA850-B**						✓
–	600	Light/Normal/Heavy	**1321-3R750-B**	**1321-3RA750-B**	**1321-3R750-B**	**1321-3RA750-B**						✓
448	600	Normal	**1321-3R750-B**	**1321-3RA750-B**	**1321-3R750-B**	**1321-3RA750-B**		✓	✓			
		Heavy	**–**	**–**	**1321-3R750-B**	**1321-3RA750-B**			✓			
		Heavy	**1321-3R750-B**	**1321-3RA750-B**	**1321-3R600-B**	**1321-3RA600-B**		✓				
450	–	Light	**1321-3R850-B**	**1321-3RA850-B**	**1321-3R850-B**	**1321-3RA850-B**						✓
–	650	Light	**1321-3R850-B**	**1321-3RA850-B**	**1321-3R850-B**	**1321-3RA850-B**						✓
		Normal	**1321-3R750-B**	**1321-3RA750-B**	**1321-3R750-B**	**1321-3RA750-B**						✓
–	700	Light/Normal/Heavy	**1321-3R850-B**	**1321-3RA850-B**	**1321-3R850-B**	**1321-3RA850-B**						✓
522	700	Normal	**1321-3R850-B**	**1321-3RA850-B**	**1321-3R850-B**	**1321-3RA850-B**		✓				
		Normal/Heavy	**–**	**–**	**1321-3RB400-B**	**1321-3RB400-B**			✓ §			
–	750	Heavy	**1321-3R850-B**	**1321-3RA850-B**	**1321-3R850-B**	**1321-3RA850-B**						✓
500	–	Normal/Heavy	**1321-3R1000-B**	**1321-3RA1000-B**	**1321-3R1000-B**	**1321-3RA1000-B**						✓
500	800	Normal/Heavy	**–**	**–**	**1321-3R500-B**	**1321-3RA500-B**			✓ §			
–	800	Light/Normal/Heavy	**1321-3R1000-B**	**1321-3RA1000-B**	**1321-3R1000-B**	**1321-3RA1000-B**						✓
560	–	Light/Normal/Heavy	**1321-3R600-B**	**1321-3RA600-B**	**1321-3R600-B**	**1321-3RA600-B**						✓ §
630	900	Light/Normal/Heavy	**1321-3R600-B**	**1321-3RA600-B**	**1321-3R600-B**	**1321-3RA600-B**						✓ §
		Normal	**–**	**–**	**1321-3R500-B**	**1321-3RA500-B**			✓ §			
		Heavy	**–**	**–**	**1321-3R600-B**	**1321-3RA600-B**			✓ §			
710	1000	Light/Normal/Heavy	**1321-3R600-B**	**1321-3RA600-B**	**1321-3R600-B**	**1321-3RA600-B**						✓ §
746	1000	Normal	**–**	**–**	**1321-3R600-B**	**1321-3RA600-B**			✓ §			
		Heavy	**–**	**–**	**1321-3R750-B**	**1321-3RA750-B**			✓ §			
800	1100	Light/Normal	**1321-3R750-B**	**1321-3RA750-B**	**1321-3R750-B**	**1321-3RA750-B**						✓ §
850	–	Light/Normal	**1321-3R750-B**	**1321-3RA750-B**	**1321-3R750-B**	**1321-3RA750-B**						✓ §
895	1200	Normal	**–**	**–**	**1321-3R750-B**	**1321-3RA750-B**			✓ §			
900	–	Light	**1321-3R850-B**	**1321-3RA850-B**	**1321-3R850-B**	**1321-3RA850-B**						✓ §
–	1250	Light/Normal	**1321-3R750-B**	**1321-3RA750-B**	**1321-3R750-B**	**1321-3RA750-B**						✓ §
933	1250	Normal	**–**	**–**	**1321-3R750-B**	**1321-3RA750-B**			✓ §			
–	1350	Light	**1321-3R850-B**	**1321-3RA850-B**	**1321-3R850-B**	**1321-3RA850-B**						✓ §
–	1500	Light	**1321-3R850-B**	**1321-3RA850-B**	**1321-3R850-B**	**1321-3RA850-B**						✓ ♠
1000	–	Light	**1321-3R850-B**	**1321-3RA850-B**	**1321-3R850-B**	**1321-3RA850-B**						✓ ♠
–	2000	Light	**1321-3R850-B**	**1321-3RA850-B**	**1321-3R850-B**	**1321-3RA850-B**						✓ ♠
1400	–	Light	**1321-3R850-B**	**1321-3RA850-B**	**1321-3R850-B**	**1321-3RA850-B**						✓ ♠

‡ Input line reactors were sized based on the NEC fundamental motor amps (PowerFlex 700H has an integral input reactor). Output line reactors were sized based on the VFD rated output currents.

§ Requires two reactors wired in parallel.

♠ Requires three reactors wired in parallel.

♦ Light Duty refers to PowerFlex 755 drives only.

Input and Output Reactors - 380…480V, 50/60 Hz, Three-Phase, 5% Impedance

kW	Hp	Duty	Input Line Reactor ‡		Output Reactor ‡		Used with PowerFlex Drive					
			IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	700	700H	700S	700L	753/755
0.25	0.33	Heavy	1321-3R1-B	1321-3RA1-B	1321-3R2-C	1321-3RA2-C	✓	✓		✓		
0.37	0.5	Normal	1321-3R1-B	1321-3RA1-B	1321-3R2-C	1321-3RA2-C	✓	✓		✓		
0.55	0.75	Heavy	1321-3R2-C	1321-3RA2-C	1321-3R2-B	1321-3RA2-B	✓	✓		✓		
0.75	1	Normal	1321-3R2-B	1321-3RA2-B	1321-3R2-B	1321-3RA2-B	✓	✓		✓		✓
1.1	1.5	Heavy	1321-3R4-D	1321-3RA4-D	1321-3R4-D	1321-3RA4-D	✓	✓		✓		✓
1.5	2	Normal	1321-3R4-D	1321-3RA4-D	1321-3R4-D	1321-3RA4-D	✓	✓		✓		✓
		Heavy	1321-3R4-D	1321-3RA4-D	1321-3R8-D	1321-3RA8-D	✓	✓		✓		✓
2.2	3	Normal	1321-3R8-D	1321-3RA8-D	1321-3R8-D	1321-3RA8-D	✓	✓		✓		✓
		Heavy	1321-3R8-D	1321-3RA8-D	1321-3R8-C	1321-3RA8-C	✓	✓		✓		✓
4	5	Normal	1321-3R8-C	1321-3RA8-C	1321-3R8-C	1321-3RA8-C	✓	✓		✓		✓
		Heavy	1321-3R8-C	1321-3RA8-C	1321-3R12-C	1321-3RA12-C	✓	✓		✓		✓
5.5	7.5	Normal	1321-3R12-C	1321-3RA12-C	1321-3R12-C	1321-3RA12-C	✓	✓		✓		✓
		Heavy	1321-3R12-C	1321-3RA12-C	1321-3R18-C	1321-3RA18-C	✓	✓		✓		✓
7.5	10	Normal	1321-3R18-C	1321-3RA18-C	1321-3R18-C	1321-3RA18-C	✓	✓		✓		✓
		Heavy	1321-3R18-C	1321-3RA18-C	1321-3R25-C	1321-3RA25-C	✓	✓		✓		✓
11	15	Normal/Heavy	1321-3R25-C	1321-3RA25-C	1321-3R25-C	1321-3RA25-C	✓	✓		✓		✓
15	20	Normal	1321-3R35-C	1321-3RA35-C	1321-3R25-C	1321-3RA25-C	✓	✓		✓		✓
		Heavy	1321-3R35-C	1321-3RA35-C	1321-3R35-C	1321-3RA35-C	✓	✓		✓		✓
18.5	25	Normal	1321-3R35-C	1321-3RA35-C	1321-3R35-C	1321-3RA35-C	✓	✓		✓		✓
		Heavy	1321-3R35-C	1321-3RA35-C	1321-3R45-C	1321-3RA45-C	✓	✓		✓		✓
22	30	Normal	1321-3R45-C	1321-3RA45-C	1321-3R45-C	1321-3RA45-C	✓	✓		✓		✓
		Heavy	1321-3R45-C	1321-3RA45-C	1321-3R55-C	1321-3RA55-C	✓	✓		✓		✓
30	40	Normal	1321-3R55-C	1321-3RA55-C	1321-3R55-C	1321-3RA55-C	✓	✓		✓		✓
		Heavy	1321-3R55-C	1321-3RA55-C	1321-3R80-C	1321-3RA80-C	✓	✓		✓		✓
37	50	Normal	1321-3R80-C	1321-3RA80-C	1321-3R80-C	1321-3RA80-C	✓	✓		✓		✓
		Heavy	1321-3R80-C	1321-3RA80-C	1321-3R80-C	1321-3RA80-C		✓		✓		✓
45	60	Normal/Heavy	1321-3R80-C	1321-3RA80-C	1321-3R80-C	1321-3RA80-C		✓		✓		✓
55	75	Normal/Heavy	1321-3R100-C	1321-3RA100-C	1321-3R100-C	1321-3RA100-C		✓		✓		✓
75	100	Normal/Heavy	1321-3R130-C	1321-3RA130-C	1321-3R130-C	1321-3RA130-C		✓		✓		✓
90	125	Normal/Heavy	1321-3R160-C	1321-3RA160-C	1321-3R160-C	1321-3RA160-C		✓		✓		✓
110	150	Normal	1321-3R200-C	1321-3RA200-C	1321-3R200-C	1321-3RA200-C		✓		✓		✓
		Heavy	1321-3R200-C	1321-3RA200-C	1321-3R200-C	1321-3RA200-C		✓	✓	✓		✓
		Heavy	1321-3RB250-C	1321-3RAB250-C	1321-3RB250-C	1321-3RAB250-C			✓	✓ ♣		
–	200	Normal/Heavy	1321-3RB250-C	1321-3RAB250-C	1321-3RB250-C	1321-3RAB250-C						✓
132	–	Normal/Heavy	1321-3RB320-C	1321-3RAB320-C	1321-3RB320-C	1321-3RAB320-C						✓
149	200	Normal	1321-3RB250-C	1321-3RAB250-C	1321-3RB250-C	1321-3RAB250-C		✓		✓ Δ		
		Heavy	1321-3RB250-C	1321-3RAB250-C	1321-3RB250-C	1321-3RAB250-C		✓	✓	✓		
160	250	Normal/Heavy	1321-3RB320-C	1321-3RAB320-C	1321-3RB320-C	1321-3RAB320-C						✓
187	250	Normal/Heavy	1321-3RB320-C	1321-3RAB320-C	1321-3RB320-C	1321-3RAB320-C		✓	✓			
–	300	Normal/Heavy	1321-3RB400-C	1321-3RAB400-C	1321-3RB400-C	1321-3RAB400-C						✓
200	–	Normal/Heavy	1321-3RB400-C	1321-3RAB400-C	1321-3RB400-C	1321-3RAB400-C						✓
224	300	Normal/Heavy	1321-3RB400-C	1321-3RAB400-C	1321-3RB400-C	1321-3RAB400-C		✓	✓			
–	350	Normal/Heavy	1321-3R500-C	1321-3R500-C	1321-3R500-C	1321-3R500-C						✓
250	–	Normal/Heavy	1321-3R500-C	1321-3RA500-C	1321-3R500-C	1321-3RA500-C						✓
261	350	Normal	1321-3R500-C	1321-3RA500-C	1321-3RB400-C	1321-3RAB400-C		✓				
		Normal	1321-3R500-C	1321-3RA500-C	1321-3R500-C	1321-3RA500-C			✓			
		Heavy	1321-3R500-C	1321-3RA500-C	1321-3RB400-C	1321-3RAB400-C		✓	✓			

continued

‡ Input line reactors were sized based on the NEC fundamental motor amps (PowerFlex 700H has an integral input reactor). Output line reactors were sized based on the VFD rated output currents.

♣ For use with 300A PowerFlex 700S.

Δ For use with 248A and 261A PowerFlex 700S.

Input and Output Reactors - 380…480V, 50/60 Hz, Three-Phase, 5% Impedance (continued)

			Input Line Reactor ‡		Output Reactor ‡		Used with PowerFlex Drive					
kW	Hp	Duty ♦	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	700	700H	700S	700L	753/755
–	400	Light/Normal/Heavy	1321-3R500-C	1321-3RA500-C	1321-3R500-C	1321-3RA500-C						✓
298	400	Normal/Heavy	1321-3R500-C	1321-3RA500-C	1321-3R500-C	1321-3RA500-C		✓				
315	–	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓
336	450	Normal/Heavy	1321-3RA600-C	1321-3RA600-C	1321-3R500-C	1321-3RA500-C		✓	✓			
–	450	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓
355	–	Light/Normal/Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C						✓
373	500	Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓	✓			
–	500	Light	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓
		Normal/Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C						✓
400	–	Light/Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C						✓
		Normal	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C						✓
448	600	Normal/Heavy	1321-3R750-E	1321-3RA750-E	1321-3R750-E	1321-3RA750-E		✓				
–	600	Light/Normal/Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C						✓
450	–	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C						✓
500	–	Normal/Heavy	1321-3R1000-C	1321-3RA1000-C	1321-3R1000-C	1321-3RA1000-C						✓
522	600	Normal/Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C			✓★			
–	650	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C						✓
		Normal	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C						✓
–	700	Light/Normal/Heavy	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C						✓
522	700	Normal	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓				
		Normal	–	–	1321-3RB400-C	1321-3RAB400-C			✓ §			
671	700	Heavy	–	–	1321-3RB400-C	1321-3RAB400-C			✓ §			
–	750	Heavy	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C						✓
–	800	Light/Normal/Heavy	1321-3R1000-C	1321-3RA1000-C	1321-3R1000-C	1321-3RA1000-C						✓
560	–	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓ §
597	800	Normal	–	–	1321-3R500-C	1321-3RA500-C			✓ §			
630	–	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓ §
746	800	Heavy	–	–	1321-3R500-C	1321-3RA500-C			✓ §			
–	900	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓ §
671	900	Normal	–	–	1321-3R500-C	1321-3RA500-C			✓ §			
		Heavy	–	–	1321-3RA600-C	1321-3RA600-C			✓ §			
710	–	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓ §
–	1000	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓ §
746	1000	Normal	–	–	1321-3RA600-C	1321-3RA600-C			✓ §			
		Heavy	–	–	1321-3R750-C	1321-3RA750-C			✓ §★			
–	1100	Light/Normal	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C						✓ §
800	–	Light/Normal	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C						✓ §
850	–	Light/Normal	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C						✓ §
895	1200	Normal	–	–	1321-3R750-C	1321-3RA750-C			✓ §★			
–	1250	Light/Normal	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C						✓ §
900	–	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C						✓ §
933	1250	Normal	–	–	1321-3R750-C	1321-3RA750-C			✓ §			
–	1350	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C						✓ §
–	1500	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C						✓ ♠
1000	–	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C						✓ ♠
–	2000	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C						✓ ♠
1400	–	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C						✓ ♠

‡ Input line reactors were sized based on the NEC fundamental motor amps (PowerFlex 700H has an integral input reactor). Output line reactors were sized based on the VFD rated output currents.

★ 4% impedance.

§ Requires two output reactors wired in parallel.

♠ Requires three reactors wired in parallel.

♦ Light Duty refers to PowerFlex 755 drives only.

Input and Output Reactors - 500…690V, 50/60 Hz, Three-Phase, 3% Impedance

			Input Line Reactor ‡		Output Reactor ‡		Used with PowerFlex Drive					
kW	Hp	Duty	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	700	700H	700S	700L	753/755
0.25	0.33	Heavy	1321-3R1-C	1321-3RA1-C	1321-3R1-B	1321-3RA1-B	✓					
0.37	0.5	Normal	1321-3R1-C	1321-3RA1-C	1321-3R1-B	1321-3RA1-B	✓					
		Heavy	1321-3R1-C	1321-3RA1-C	1321-3R2-B	1321-3RA2-B		✓		✓		
0.55	0.75	Heavy	1321-3R2-B	1321-3RA2-B	1321-3R2-B	1321-3RA2-B	✓					
0.75	1	Normal	1321-3R2-B	1321-3RA2-B	1321-3R2-B	1321-3RA2-B	✓	✓		✓		✓
		Heavy	1321-3R2-B	1321-3RA2-B	1321-3R4-D	1321-3RA4-D		✓		✓		✓
1.1	1.5	Heavy	1321-3R2-A	1321-3RA2-A	1321-3R4-D	1321-3RA4-D	✓					
1.5	2	Normal	1321-3R4-C	1321-3RA4-C	1321-3R4-D	1321-3RA4-D	✓					
		Heavy	1321-3R4-C	1321-3RA4-C	1321-3R4-C	1321-3RA4-C	✓					✓
		Normal	1321-3R4-D	1321-3RA4-D	1321-3R4-D	1321-3RA4-D		✓		✓		✓
		Heavy	1321-3R4-D	1321-3RA4-D	1321-3R4-C	1321-3RA4-C		✓		✓		✓
2.2	3	Normal	1321-3R4-C	1321-3RA4-C	1321-3R4-C	1321-3RA4-C	✓	✓		✓		✓
		Heavy	1321-3R4-C	1321-3RA4-C	1321-3R8-C	1321-3RA8-C	✓	✓		✓		
4	5	Normal	1321-3R8-C	1321-3RA8-C	1321-3R8-C	1321-3RA8-C	✓	✓		✓		✓
		Heavy	1321-3R8-C	1321-3RA8-C	1321-3R12-C	1321-3RA12-C	✓	✓		✓		✓
5.5	7.5	Normal	1321-3R12-C	1321-3RA12-C	1321-3R12-C	1321-3RA12-C	✓	✓		✓		✓
		Heavy	1321-3R12-C	1321-3RA12-C	1321-3R12-B	1321-3RA12-B	✓	✓		✓		✓
7.5	10	Normal	1321-3R12-B	1321-3RA12-B	1321-3R12-B	1321-3RA12-B	✓	✓		✓		✓
		Heavy	1321-3R12-B	1321-3RA12-B	1321-3R18-B	1321-3RA18-B	✓	✓		✓		✓
11	15	Normal	1321-3R18-B	1321-3RA18-B	1321-3R18-B	1321-3RA18-B	✓	✓		✓		✓
		Heavy	1321-3R18-B	1321-3RA18-B	1321-3R25-B	1321-3RA25-B	✓	✓		✓		✓
15	20	Normal	1321-3R25-B	1321-3RA25-B	1321-3R25-B	1321-3RA25-B	✓	✓		✓		✓
		Heavy	1321-3R25-B	1321-3RA25-B	1321-3R35-C	1321-3RA35-C	✓	✓		✓		✓
18.5	25	Normal	1321-3R35-C	1321-3RA35-C	1321-3R35-C	1321-3RA35-C	✓	✓		✓		✓
		Heavy	1321-3R35-C	1321-3RA35-C	1321-3R35-B	1321-3RA35-B	✓	✓		✓		✓
22	30	Normal	1321-3R35-B	1321-3RA35-B	1321-3R35-B	1321-3RA35-B	✓	✓		✓		✓
		Heavy	1321-3R35-B	1321-3RA35-B	1321-3R45-B	1321-3RA45-B	✓	✓		✓		✓
30	40	Normal	1321-3R45-B	1321-3RA45-B	1321-3R45-B	1321-3RA45-B	✓	✓		✓		✓
		Heavy	1321-3R45-B	1321-3RA45-B	1321-3R55-B	1321-3RA55-B	✓	✓		✓		✓
37	50	Normal	1321-3R55-B	1321-3RA55-B	1321-3R55-B	1321-3RA55-B	✓	✓		✓		✓
		Heavy	1321-3R55-B	1321-3RA55-B	1321-3R80-B	1321-3RA80-B		✓		✓		✓
45	60	Normal/Heavy	1321-3R80-B	1321-3RA80-B	1321-3R80-B	1321-3RA80-B		✓		✓		✓
55	75	Normal/Heavy	1321-3R80-B	1321-3RA80-B	1321-3R80-B	1321-3RA80-B		✓		✓		✓
75	100	Normal/Heavy	1321-3R100-B	1321-3RA100-B	1321-3R100-B	1321-3RA100-B		✓		✓		✓
90	125	Normal/Heavy	1321-3R130-B	1321-3RA130-B	1321-3R130-B	1321-3RA130-B		✓		✓		✓
110	150	Normal	1321-3R160-B	1321-3RA160-B	1321-3R160-B	1321-3RA160-B		✓		✓		✓
		Normal/Heavy	–	–	1321-3R200-C	1321-3RA200-C			✓			
132	–	Heavy	–	–	1321-3RB250-C	1321-3RAB250-C			✓			
149	200	Normal/Heavy	–	–	1321-3R200-B	1321-3RA200-B			✓			
160	–	Normal/Heavy	–	–	1321-3RB250-C	1321-3RAB250-C			✓			
187	250	Normal/Heavy	–	–	1321-3RB250-B	1321-3RAB250-B			✓			
–	300	Heavy	1321-3RB320-B	1321-3RAB320-B	1321-3RB320-B	1321-3RAB320-B						✓
200	–	Normal	–	–	1321-3RB250-C	1321-3RAB250-C			✓			
		Heavy	–	–	1321-3RB320-C	1321-3RAB320-C			✓			
		Heavy	1321-3R250-B	1321-3RA250-B	1321-3R250-B	1321-3RA250-B						✓
–	350	Light/Normal/Heavy	1321-3RB400-B	1321-3RAB400-B	1321-3RB400-B	1321-3RAB400-B						✓
250	–	Normal	–	–	1321-3RB320-C	1321-3RAB320-C			✓			
		Heavy	–	–	1321-3RB400-C	1321-3RAB400-C			✓			
		Normal/Heavy	1321-3RB320-B	1321-3RAB320-B	1321-3RB320-B	1321-3RAB320-B						✓
261	350	Normal/Heavy	–	–	1321-3RB320-B	1321-3RAB320-B			✓			

‡ Input line reactors were sized based on the NEC fundamental motor amps (PowerFlex 700H has an integral input reactor). Output line reactors were sized based on the VFD rated output currents.

Input and Output Reactors - 500…690V, 50/60 Hz, Three-Phase, 3% Impedance (continued)

			Input Line Reactor ‡		Output Reactor ‡		Used with PowerFlex Drive					
kW	Hp	Duty	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	700	700H	700S	700L	753/755
298	400	Normal/Heavy	–	–	1321-3RB400-B	1321-3RAB400-B			✓			
–	400	Light/Normal/Heavy	1321-3RB400-B	1321-3RAB400-B	1321-3RB400-B	1321-3RAB400-B						✓
300	–	Heavy	1321-3RB400-B	1321-3RAB400-B	1321-3RB400-B	1321-3RAB400-B						✓
–	450	Light/Normal/Heavy	1321-3R500-B	1321-3RA500-B	1321-3R500-B	1321-3RA500-B						✓
315	–	Normal	–	–	1321-3RB400-C	1321-3RAB400-C			✓			
		Heavy	–	–	1321-3R500-C	1321-3RA500-C			✓			
		Light/Normal	1321-3RB400-B	1321-3RAB400-B	1321-3RB400-B	1321-3RAB400-B						✓
336	450	Normal	–	–	1321-3RB400-B	1321-3RAB400-B			✓			
		Normal	–	–	1321-3R500-B	1321-3RA500-B			✓			
		Heavy	–	–	1321-3RB400-B	1321-3RAB400-B			✓			
–	500	Light/Normal/Heavy	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B						✓
355	–	Normal	–	–	1321-3R500-C	1321-3RA500-C			✓			
		Heavy	–	–	1321-3R600-C	1321-3RA600-C			✓			
		Light/Normal/Heavy	1321-3R500-B	1321-3RA500-B	1321-3R500-B	1321-3RA500-B						✓
373	500	Normal/Heavy	–	–	1321-3R500-B	1321-3RA500-B			✓			
–	550	Light	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B						✓
375	–	Heavy	1321-3R500-B	1321-3RA500-B	1321-3R500-B	1321-3RA500-B						✓
400	–	Normal	–	–	1321-3R500-C	1321-3RA500-C			✓			
		Light/Normal/Heavy	1321-3R500-B	1321-3RA500-B	1321-3R500-B	1321-3RA500-B						✓
448	600	Normal	–	–	1321-3R600-B	1321-3RA600-B			✓			
–	600	Normal/Heavy	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B						✓
450	–	Normal/Heavy	–	–	1321-3R600-C	1321-3RA600-C			✓			
		Light/Normal	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B						✓
485	650	Heavy	–	–	1321-3RB320-B	1321-3RAB320-B			✓ §			
500	–	Normal	–	–	1321-3R600-C	1321-3RA600-C			✓			
		Heavy	–	–	1321-3R750-C	1321-3RA750-C			✓			
		Light/Normal/Heavy	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B						✓
522	700	Normal	–	–	1321-3RB320-B	1321-3RAB320-B			✓ §			
		Heavy	–	–	1321-3RB400-C	1321-3RAB400-C			✓ §			
–	700	Light/Normal/Heavy	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B						✓
530	–	Light	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B						✓
560	–	Normal	–	–	1321-3R750-C	1321-3RA750-C			✓			
		Heavy	–	–	1321-3RB400-C	1321-3RAB400-C			✓ §			
		Normal/Heavy	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B						✓
–	750	Heavy	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B						✓
597	800	Normal	–	–	1321-3RB400-C	1321-3RAB400-C			✓ §			
–	800	Light/Normal/Heavy	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B						✓
630	–	Normal	–	–	1321-3RB400-C	1321-3RAB400-C			✓ §			
		Heavy	–	–	1321-3R500-C	1321-3RA500-C			✓ §			
		Light/Normal/Heavy	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B						✓
671	900	Normal	–	–	1321-3RB400-B	1321-3RAB400-B			✓ §			
		Heavy	–	–	1321-3R1000-C	1321-3RA1000-C			✓			
–	900	Light/Normal/Heavy	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B						✓
710	–	Normal	–	–	1321-3R500-C	1321-3RA500-C			✓ §			
		Light/Normal/Heavy	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B						✓
–	950	Light/Normal	1321-3R1000-B	1321-3RA1000-B	1321-3R1000-B	1321-3RA1000-B						✓
746	1000	Normal	–	–	1321-3R1000-C	1321-3RA1000-C			✓			
		Heavy	–	–	1321-3R1000-B	1321-3RA1000-B			✓			

continued

‡ Input line reactors were sized based on the NEC fundamental motor amps (PowerFlex 700H has an integral input reactor). Output line reactors were sized based on the VFD rated output currents.

§ Requires two reactors wired in parallel.

Input and Output Reactors - 500…690V, 50/60 Hz, Three-Phase, 3% Impedance (continued)

			Input Line Reactor ‡		Output Reactor ‡		Used with PowerFlex Drive					
kW	Hp	Duty	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	700	700H	700S	700L	753/755
750	–	Normal	**1321-3R850-B**	**1321-3RA850-B**	**1321-3R850-B**	**1321-3RA850-B**						✓
800	–	Normal	–	–	**1321-3R500-C**	**1321-3RA500-C**			✓ §			
		Heavy	–	–	**1321-3R600-C**	**1321-3RA600-C**			✓ §			
		Light/Normal/Heavy	**1321-3R1000-B**	**1321-3RA1000-B**	**1321-3R1000-B**	**1321-3RA1000-B**						✓
–	1000	Light/Normal	**1321-3R1000-B**	**1321-3RA1000-B**	**1321-3R1000-B**	**1321-3RA1000-B**						✓
821	1100	Normal	–	–	**1321-3R1000-B**	**1321-3RA1000-B**			✓			
		Heavy	–	–	**1321-3R600-B**	**1321-3RA600-B**			✓ §			
–	1100	Light	**1321-3R600-B**	**1321-3RA600-B**	**1321-3R600-B**	**1321-3RA600-B**						✓ §
850	–	Light	**1321-3R1000-B**	**1321-3RA1000-B**	**1321-3R1000-B**	**1321-3RA1000-B**						✓
900	–	Normal/Heavy	–	–	**1321-3R600-C**	**1321-3RA600-C**			✓ §			
		Light/Normal	**1321-3R600-B**	**1321-3RA600-B**	**1321-3R600-B**	**1321-3RA600-B**						✓ §
970	1300	Normal	–	–	**1321-3R600-B**	**1321-3RA600-B**			✓ §			
1000	–	Normal	–	–	**1321-3R600-C**	**1321-3RA600-C**			✓ §			
		Heavy	–	–	**1321-3R750-C**	**1321-3RA750-C**			✓ §			
		Light	**1321-3R600-B**	**1321-3RA600-B**	**1321-3R600-B**	**1321-3RA600-B**						✓ §
1100	–	Normal	–	–	**1321-3R750-C**	**1321-3RA750-C**			✓ §			
	–	Light/Normal	**1321-3R600-B**	**1321-3RA600-B**	**1321-3R600-B**	**1321-3RA600-B**						✓ ♠
–	1200	Light	**1321-3R600-B**	**1321-3RA600-B**	**1321-3R600-B**	**1321-3RA600-B**						✓ ♠
1500	–	Light/Normal	**1321-3R600-B**	**1321-3RA600-B**	**1321-3R600-B**	**1321-3RA600-B**						✓ ♠
–	1500	Light	**1321-3R600-B**	**1321-3RA600-B**	**1321-3R600-B**	**1321-3RA600-B**						✓ ♠

‡ Input line reactors were sized based on the NEC fundamental motor amps (PowerFlex 700H has an integral input reactor). Output line reactors were sized based on the VFD rated output currents.

§ Requires two reactors wired in parallel.

♠ Requires three reactors wired in parallel.

Input and Output Reactors - 500…690V, 50/60 Hz, Three-Phase, 5% Impedance

			Input Line Reactor ‡		Output Reactor ‡		Used with PowerFlex Drive					
kW	Hp	Duty	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	700	700H	700S	700L	753/755
0.25	0.33	Heavy	1321-3R1-A	1321-3RA1-A	1321-3R1-B	1321-3RA1-B	✓					
0.37	0.5	Normal	1321-3R1-B	1321-3RA1-B	1321-3R1-B	1321-3RA1-B	✓					
0.37	0.5	Heavy	1321-3R1-B	1321-3RA1-B	1321-3R2-C	1321-3RA2-C		✓		✓		
0.55	0.75	Heavy	1321-3R2-C	1321-3RA2-C	1321-3R2-C	1321-3RA2-C	✓					
0.75	1	Normal	1321-3R2-C	1321-3RA2-C	1321-3R2-C	1321-3RA2-C	✓	✓		✓		✓
		Heavy	1321-3R2-C	1321-3RA2-C	1321-3R4-D	1321-3RA4-D		✓		✓		✓
1.1	1.5	Heavy	1321-3R2-B	1321-3RA2-B	1321-3R4-D	1321-3RA4-D	✓	✓		✓		
1.5	2	Normal/Heavy	1321-3R4-D	1321-3RA4-D	1321-3R4-D	1321-3RA4-D	✓	✓		✓		✓
2.2	3	Normal	1321-3R4-D	1321-3RA4-D	1321-3R4-D	1321-3RA4-D	✓	✓		✓		✓
		Heavy	1321-3R4-D	1321-3RA4-D	1321-3R8-D	1321-3RA8-D	✓	✓		✓		✓
4	5	Normal	1321-3R8-D	1321-3RA8-D	1321-3R8-D	1321-3RA8-D	✓	✓		✓		✓
		Heavy	1321-3R8-D	1321-3RA8-D	1321-3R12-C	1321-3RA12-C	✓	✓		✓		✓
5.5	7.5	Normal/Heavy	1321-3R12-C	1321-3RA12-C	1321-3R12-C	1321-3RA12-C	✓	✓		✓		✓
7.5	10	Normal	1321-3R12-C	1321-3RA12-C	1321-3R12-C	1321-3RA12-C	✓	✓		✓		✓
		Heavy	1321-3R12-C	1321-3RA12-C	1321-3R18-C	1321-3RA18-C	✓	✓		✓		✓
11	15	Normal	1321-3R18-C	1321-3RA18-C	1321-3R18-C	1321-3RA18-C	✓	✓		✓		✓
		Heavy	1321-3R18-C	1321-3RA18-C	1321-3R25-C	1321-3RA25-C	✓	✓		✓		✓
15	20	Normal	1321-3R25-C	1321-3RA25-C	1321-3R25-C	1321-3RA25-C	✓	✓		✓		✓
		Heavy	1321-3R25-C	1321-3RA25-C	1321-3R35-C	1321-3RA35-C	✓	✓		✓		✓
18.5	25	Normal/Heavy	1321-3R35-C	1321-3RA35-C	1321-3R35-C	1321-3RA35-C	✓	✓		✓		✓
22	30	Normal	1321-3R35-C	1321-3RA35-C	1321-3R35-C	1321-3RA35-C	✓	✓		✓		✓
		Heavy	1321-3R35-C	1321-3RA35-C	1321-3R45-C	1321-3RA45-C	✓	✓		✓		✓
30	40	Normal	1321-3R45-C	1321-3RA45-C	1321-3R45-C	1321-3RA45-C	✓	✓		✓		✓
		Heavy	1321-3R45-C	1321-3RA45-C	1321-3R55-C	1321-3RA55-C	✓	✓		✓		✓
37	50	Normal	1321-3R55-C	1321-3RA55-C	1321-3R55-C	1321-3RA55-C	✓	✓		✓		✓
		Heavy	1321-3R55-C	1321-3RA55-C	1321-3R80-C	1321-3RA80-C		✓		✓		✓
45	60	Normal/Heavy	1321-3R80-C	1321-3RA80-C	1321-3R80-C	1321-3RA80-C		✓		✓		✓
55	75	Normal/Heavy	1321-3R80-C	1321-3RA80-C	1321-3R80-C	1321-3RA80-C		✓		✓		✓
75	100	Normal/Heavy	1321-3R100-C	1321-3RA100-C	1321-3R100-C	1321-3RA100-C		✓		✓		✓
90	125	Normal/Heavy	1321-3R130-C	1321-3RA130-C	1321-3R130-C	1321-3RA130-C		✓		✓		✓
110	150	Normal	1321-3R160-C	1321-3RA160-C	1321-3R160-C	1321-3RA160-C		✓		✓		✓
		Heavy	–	–	1321-3R160-C	1321-3RA160-C			✓★			
		Normal	–	–	1321-3R200-C	1321-3RA200-C			✓Δ			
149	200	Normal	–	–	1321-3R200-B	1321-3RA200-B			✓★			
		Heavy	–	–	1321-3R200-C	1321-3RA200-C			✓★			
187	250	Normal/Heavy	–	–	1321-3RB250-C	1321-3RAB250-C			✓★			
–	300	Heavy	1321-3RB320-C	1321-3RAB320-C	1321-3RB320-C	1321-3RAB320-C						✓
200	–	Heavy	1321-3R250-C	1321-3RA250-C	1321-3R250-C	1321-3RA250-C						✓
–	350	Light/Normal/Heavy	1321-3RB400-C	1321-3RAB400-C	1321-3RB400-C	1321-3RAB400-C						✓
250	–	Normal/Heavy	1321-3RB320-C	1321-3RAB320-C	1321-3RB320-C	1321-3RAB320-C						✓
261	350	Normal/Heavy	–	–	1321-3RB320-C	1321-3RAB320-C			✓★			
–	400	Light/Normal/Heavy	1321-3RB400-C	1321-3RAB400-C	1321-3RB400-C	1321-3RAB400-C						✓
298	400	Normal/Heavy	–	–	1321-3RB400-C	1321-3RAB400-C			✓★			

continued

‡ Input line reactors were sized based on the NEC fundamental motor amps (PowerFlex 700H has an integral input reactor). Output line reactors were sized based on the VFD rated output currents.

★ 4% impedance.

Δ 3% impedance.

Input and Output Reactors - 500…690V, 50/60 Hz, Three-Phase, 5% Impedance (continued)

			Input Line Reactor ‡		Output Reactor ‡		Used with PowerFlex Drive					
kW	Hp	Duty	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	700	700H	700S	700L	753/755
300	–	Heavy	1321-3RB400-C	1321-3RAB400-C	1321-3RB400-C	1321-3RAB400-C						✓
315	–	Light/Normal	1321-3RB400-C	1321-3RAB400-C	1321-3RB400-C	1321-3RAB400-C						✓
–	450	Light/Normal/Heavy	1321-3R500-C	1321-3RA500-C	1321-3R500-C	1321-3RA500-C						✓
336	450	Normal	–	–	1321-3R500-C	1321-3RA500-C			✓ ★			
		Heavy	–	–	1321-3RB400-C	1321-3RAB400-C			✓			
–	500	Light/Normal	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓
355	–	Light/Normal/Heavy	1321-3R500-C	1321-3RA500-C	1321-3R500-C	1321-3RA500-C						✓
373	500	Normal/Heavy	–	–	1321-3R500-C	1321-3RA500-C			✓			
–	550	Light	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓
375	–	Heavy	1321-3R500-C	1321-3RA500-C	1321-3R500-C	1321-3RA500-C						✓
400	–	Light/Normal/Heavy	1321-3R500-C	1321-3RA500-C	1321-3R500-C	1321-3RA500-C						✓
448	600	Normal	–	–	1321-3R600-C	1321-3RA600-C			✓ ★			
–	600	Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓
450	–	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓
485	650	Heavy	–	–	1321-3RB320-C	1321-3RAB320-C			✓ ★§			
500	–	Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓
522	700	Normal	–	–	1321-3RB320-C	1321-3RAB320-C			✓ ★§			
		Heavy	–	–	1321-3RB400-C	1321-3RAB400-C			✓ ★§			
–	700	Light/Normal/Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C						✓
530	–	Light	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓
–	750	Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C						✓
560	–	Normal/Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C						✓
597	800	Normal	–	–	1321-3RB400-C	1321-3RAB400-C			✓ ★§			
–	800	Light/Normal/Heavy	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C						✓
630	–	Light/Normal/Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C						✓
671	900	Normal	–	–	1321-3RB400-C	1321-3RAB400-C			✓ §			
		Heavy	–	–	1321-3R500-C	1321-3RA500-C			✓ ★§			
–	900	Light/Normal/Heavy	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C						✓
–	950	Light/Normal	1321-3R1000-C	1321-3RA1000-C	1321-3R1000-C	1321-3RA1000-C						✓
710	–	Light/Normal/Heavy	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C						✓
746	1000	Normal	–	–	1321-3R500-C	1321-3RA500-C			✓ ★§			
		Heavy	–	–	1321-3R1000-C	1321-3RA1000-C			✓ ★			
750	–	Normal	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C						✓
–	1000	Light/Normal	1321-3R1000-C	1321-3RA1000-C	1321-3R1000-C	1321-3RA1000-C						✓
800	–	Light/Normal/Heavy	1321-3R1000-C	1321-3RA1000-C	1321-3R1000-C	1321-3RA1000-C						✓
821	1100	Normal	–	–	1321-3R1000-C	1321-3RA1000-C			✓ ★			
		Heavy	–	–	1321-3R600-C	1321-3RA600-C			✓ ★§			
–	1100	Light	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓ §
850	–	Light	1321-3R1000-C	1321-3RA1000-C	1321-3R1000-C	1321-3RA1000-C						✓
900	–	Light/Normal	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓ §
970	1300	Normal	–	–	1321-3R600-C	1321-3RA600-C			✓ ★§			
1000	–	Light	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓ §
1100	–	Light/Normal	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓ ♠
–	1200	Light	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓ ♠
1500	–	Light/Normal	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓ ♠
–	1500	Light	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C						✓ ♠

‡ Input line reactors were sized based on the NEC fundamental motor amps (PowerFlex 700H has an integral input reactor). Output line reactors were sized based on the VFD rated output currents.

★ 4% impedance.

§ Requires two output reactors wired in parallel.

♠ Requires three reactors wired in parallel.

Notes

PowerFlex 7000 Medium Voltage Drives

Improve efficiency and maximize profitability

The Allen-Bradley PowerFlex 7000 medium voltage drives enable soft-starting and variable-speed control for processes with high power demands from 150…25,400 kW / 200…34,000 Hp. The family of PowerFlex medium voltage drives is designed to help maximize your uptime and provide the lowest total cost of ownership. Patented PowerCage™ modules allow you to replace power devices in less than ten minutes, reducing your installation time and costs by using a central cabling cabinet for the complete drive package. Additionally, with advanced power semiconductor technology, component count is reduced to the lowest of any medium voltage drive available – translating to increased savings and reliability, reduced downtime and fewer spare parts. New color touch screen operator interfaces offer features like remote mounting, giving you flexible mounting options. Other interface enhancements include PDF viewing to access project-specific documentation; quick and easy firmware upgrades and a consolidated control interface for synchronous transfer drive systems. As with the family of PowerFlex low voltage drives, you can easily monitor and control your processes via communications and software providing you with valuable and timely information to help in decision making.

Direct-to-Drive™ Technology

Reduce the cost, size and weight of your medium voltage drive system with the Allen-Bradley PowerFlex 7000 with Direct-to-Drive technology. This is the first technology that allows you to directly connect a medium voltage drive to utility power without the requirement of an isolation transformer. Isolation transformers with multiple secondary windings are required for traditional AC drives to address line-side harmonic concerns and common mode voltage. However, typical isolation transformers are large, heavy, costly, complex and inefficient. Direct-to-Drive technology combines an Active Front End (AFE) rectifier to dramatically lower line-side harmonics and a patented DC link inductor to address common mode voltage at its source. By addressing harmonics and common mode voltage, the isolation transformer becomes redundant. This reduces system complexity to maximize uptime and increases system efficiency to lower operational costs. Exceptional output voltage and current waveforms, true of our entire product line, make this ideal for retrofit applications and allow the use of standard motors for new applications.

Air-Cooled

Enhance motor control and increase energy efficiency on motor applications from 150...5884 kW / 200...8000 Hp with the Allen-Bradley PowerFlex 7000 air-cooled medium voltage AC variable frequency drives. Three configurations (Direct-to-Drive, AFE and 18-pulse) allow optimal flexibility for a variety of installations.

Liquid-Cooled

Users with higher power needs can reduce energy use and improve process control on motors from 2240...6340 kW / 3000...8500 Hp at 4160 to 6600V nominal supply voltage ratings. Increase reliability with the closed-loop liquid-cooling system with liquid-to-air or liquid-to-liquid style heat exchanger options and an integral pump cabinet.

Extended Power

Available up to 25,400 kW / 34,000 Hp, these high power air-cooled and liquid-cooled drive modules have the proven technology and benefits of PowerFlex 7000 medium voltage drives. PowerFlex 7000 extended power drive systems are effective solutions for hot back-up and redundancy, LCI retrofits, and horsepower upgrades.

PowerFlex 7000 "A" Frame

- Air cooling
- Low end power range, 150...930 kW / 200...1250 Hp
- 2400 to 6600V nominal supply voltage ratings
- Compact packaging for smallest footprint requirements
- Three input configurations for optimum installation flexibility

  1) Direct-to-Drive

  2) AFE Rectifier (connection to separate isolation transformer)

  3) AFE Rectifier (complete with integral isolation transformer)
- Normal duty service rating (for variable torque loads, 110% overload for 1 minute every 10 minutes)
- Heavy duty service rating (for constant torque loads, 150% overload for 1 minute every 10 minutes)
- Active Front End rectifier for low line harmonics, high power factor and commonality of parts
- Three (3) cables in/Three (3) cables out for lower installation costs

PowerFlex 7000 "B" Frame

- Air cooling
- Low and Medium power range, 150...5884 kW / 200...8000 Hp
- 2400 to 6600V nominal supply voltage ratings
- Normal duty service rating (for variable torque loads, 110% overload for 1 minute every 10 minutes)
- Heavy duty service rating (for constant torque loads, 150% overload for 1 minute every 10 minutes)
- Three input configurations for optimum installation flexibility

  1) Direct-to-Drive

  2) AFE Rectifier (for connection to separate transformer)

  3) 18-pulse rectifier for low line harmonics and connection to a high voltage distribution system
- Three (3) cables in / Three (3) cables out (AFE rectifier)
- Nine (9) cables in / Three (3) cables out (18-pulse rectifier)

PowerFlex 7000L "C" Frame

- Closed loop liquid cooling system with liquid-to-air or liquid-to-liquid style heat exchangers
- High end power range, 2240...6340 kW / 3000...8500 Hp
- 4160 to 6600V nominal supply voltage ratings
- Small integrated package for high end power range
- Normal duty service rating (for variable torque loads, 110% overload for 1 minute every 10 minutes)
- Heavy duty service rating (for constant torque loads, 150% overload for 1 minute every 10 minutes)
- Three input configurations for optimum installation flexibility:

  1) Direct-to-Drive

  2) AFE Rectifier (for connection to separate transformer)

  3) 18-pulse rectifier for low line harmonics and connection to a high voltage distribution system
- Three (3) cables in / Three (3) cables out (AFE rectifier)
- Nine (9) cables in / Three (3) cables out (18-pulse rectifier)

For more information on Medium Voltage PowerFlex Drives see the Selection Guide: 7000-SG010_

Software

DriveTools SP Software

DriveTools SP is a family of software tools designed for Microsoft® Windows® 2000/XP/Vista/7 operating systems. These applications provide a simplified programming interface for programming, troubleshooting, and maintaining your PowerFlex AC and DC drive products.

Easy to use menus, dialogs, wizards, and graphic displays help you quickly start up your PowerFlex drive product. Powerful diagnostic features simplify diagnosing drive as well as system problems.

DriveTools SP feature enhancements over DriveExplorer:
- Offline configuration
- RSLinx connectivity
- Trend charts (DriveObserver)
- Overview diagrams

DriveExecutive

DriveExecutive™

This software is an online/offline drive and adapter configuration tool that leverages Windows Explorer-style navigation, built-in html product help, and handy diagnostic and setup wizards. A state-of-the-art comparison tool lets you look at differences and make two devices/files the same.

DriveObserver

DriveObserver™

This software provides real-time chart displays of drive performance to help you set up, tune, and troubleshoot your drive applications. Charts can contain parameters from multiple drives and/or adapters from multiple networks as needed. Files save data for offline viewing and chart set up for collecting new data later.

Product Selection

Application	Cat. No.	No. of Licenses
DriveExecutive	**9303-4DTE01ENE**	1
DriveTools SP Suite -includes DriveExecutive, DriveObserver	**9303-4DTS01ENE**	1
DriveTools SP Suite Upgrade from DriveExecutive-includes DriveExecutive, DriveObserver	**9303-4DTE2S01ENE**	1

Media

DriveExecutive and DriveTools SP distribution media is CD-ROM, and the language supported is English.

Connected Components Workbench Software

Connected Components Workbench is a set of collaborative tools for PowerFlex drives, Micro800™ controllers and PanelView™ Component operator interface products for your small machine. It is based on proven Rockwell Automation and Microsoft Visual Studio technology and offers device configuration, controller programming and integration with HMI editor. Configure your drives, program your controller and design your operator interface screens using this software.

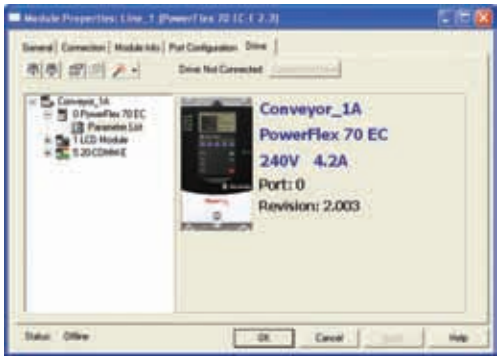
Connected Components Workbench can help minimize your initial machine development with free IEC 61131-3 standard software download. Free standard software updates and limited free support are also included. Connected Components Workbench advantages include:
- Easy to acquire and install
- Plug and play connectivity to select devices via standard USB
- Online and offline configuration
- Same wizards as DriveExplorer and DriveExecutive

Free download available at:
http://ab.rockwellautomation.com/Programmable-Controllers/Connected-Components-Workbench-Software

DVD also available for: 9328-SO001B-EN-C, 9328-SO001B-FR-C and 9328-SO001B-ZH-Z

Studio 5000™ Logix Designer

Add-on-Profiles



Studio 5000 Logix Designer (formerly RSLogix 5000) software includes full configuration and download support for the Rockwell Automation PowerFlex family of AC drives and select legacy drives. By integrating this part of the system into a single software package, management of drives in a control system is easier because there is only one software package to buy and learn.

Integrated PowerFlex configuration and setup wizards streamline drives installation with EtherNet/IP and ControlNet networks by eliminating the task of individually configuring the required drive parameters and tags. You no longer have to complete complicated programming functions when installing drives or constantly refer back to user manuals for specific parameter and tag information.

- Compatible with Studio 5000 Logix Designer and RSLogix 5000 v16 and higher, and for select drives on ControlNet or EtherNet/IP
- Dynamically select drive parameters transmitted as network I/O
- Wizards walk you through drive parameter configuration
- Diagnostic, fault, alarm, and event information are integral to Studio 5000 through the use of Add-On Profiles
- Allows continual use with DriveTools SP via import/export function
- Access, edit and save drive information to the control system project with ease
- Studio 5000 Logix Designer and RSLogix 5000 v20 add Automatic Device Configuration (ADC) support for the PowerFlex 525 and PowerFlex 750-Series drives. With ADC, the Logix controller can automatically detect a replaced drive and download all configuration parameters, eliminating the need for manual reconfiguration and reducing downtime

Drive Add-On Profiles ship with Studio 5000 Logix Designer and are also available via free download at: http://www.ab.com/support/abdrives/webupdate

Drive Control Instructions in the Logix Environment

PowerFlex 755 AC drives can be configured with drive instructions embedded in Allen-Bradley ControlLogix and CompactLogix (available with RSLogix 5000 v20 and higher) Programmable Automation Controllers (PAC). These are the same configuration parameters and programming instructions as those used by Allen-Bradley Kinetix® servo drives. The generated application code can be applied to both drive platforms to significantly reduce programming time and provide a common, enhanced user experience.

Engineering tools within a single software package – Studio 5000 Logix Designer – provide simplified configuration, programming, commissioning, diagnostics and maintenance for PowerFlex 755 and Kinetix servo drives. This integration simplifies use and helps to deliver the accuracy and synchronization required by the application. In addition, the use of EtherNet/IP for your PowerFlex and Kinetix drives helps to increase machine design flexibility, improve system performance, and reduce system cost.

Studio 5000 Logix Designer and RSLogix 5000

Studio 5000 Logix Designer is the latest version (v21) of RSLogix 5000 and provides one software package for discrete, process, batch, motion, safety and drive-based applications.

The PowerFlex 525 AC drive is compatible with both Studio 5000 Logix Designer and RSLogix 5000 (v17 and higher). Any of these software options can help you reduce your programming time, ease startup and commissioning and streamline diagnostics.

Rockwell Automation Services and Support

Rockwell Automation Services & Support can help you meet your everyday technical needs and maximize your return on automation investments by providing value-add maintenance, lifecycle management and system optimization solutions. Applicable throughout your entire enterprise, these solutions can help you meet your goals by increasing speed to change, improving equipment performance to specifications, decreasing downtime and reducing costs. They will also help you create a more sustainable production environment by reducing energy consumption, driving green initiatives and improving safety.

Assurance™ Integrated Support is a service agreement covering all of your remote support, replacement parts and on-site service needs for one fixed fee.

Startup and Commissioning Services will quickly commission select drives to help you reduce the time between integration and actual startup. Our standardized process validates that necessary electrical, mechanical and environmental criteria have been met and the appropriate steps have been taken to ensure proper drive operation. This service also comes with an Extended Parts & Labor Warranty.

Manufacturing Convergence, merging IT and manufacturing systems – has created the need for two groups once purposely separated, to now coexist creating an unique capability to seemliness integrate the enterprise and manufacturing levels.

Network and Security Services provide you with a knowledgeable team, expertly trained in both manufacturing and IT with domain expertise to provide you with the appropriate services your industrial control and information networks require.

OnSite Services provide field service professionals on an as needed, scheduled or full-time basis to perform drive startup services, conversion services or preventive maintenance.

Safety Services help you comply with safety standards to reduce the risk of injuries and improve productivity. Our global safety team of principle consultants can help you at any step of a safeguarding project – from training and standards assistance through validation and startup.

Training Services provides a Drives Curriculum Map with over a dozen drive-specific instructor-led training courses. In addition, web-based training materials are also available.

Repair Services from Rockwell Automation, the original equipment manufacturer, can provide complete, cost-effective remanufacturing services and factory enhancements that extend equipment life, enhancing its performance and compatibility.

Remanufacturing Services
Three delivery/warranty options:

- Next Day (24 month warranty)*
- 3-5 Days (18 month warranty)*
- 2-3 Weeks (12 month warranty)*

* Delivery options for US only

Repair of non-Rockwell Automation Products

- Single source for all electric/electronic, mechanical, and servo repairs
- 200,000+ items, 7000+ manufacturers

Annual Repair Agreements
Take advantage of a fixed price agreement to help you stabilize your annual repair budget, which can include functional validation of spares.

Online and Phone Support provides your site with unlimited access to our technical support engineers through TechConnect[sm] Support. Receive 24x7 support for your products, systems and applications on the phone or via the Rockwell Automation Support Center Knowledgebase, forums, live chat and "Submit Questions" email support. TechConnect also provides the most current and released software downloads.

Contact an authorized Rockwell Automation distributor or Rockwell Automation representative or visit www.rockwellautomation.com/services for more information.

Additional Resources

PowerFlex Drives	www.ab.com/drives
PowerFlex Drives Catalog Information	www.ab.com/catalogs
Technical Support & Service	www.ab.com/support/abdrives
Product Selection Tools	www.ab.com/e-tools
All publications can be found online	www.rockwellautomation.com/literature
Low Voltage PowerFlex Drives Installation Instructions and User Manuals	Search by respective product
PowerFlex DC Selection Guide	20P-SG001_
Drives Wiring & Grounding Guide (PWM) AC Drives	DRIVES-IN001_
Medium Voltage PowerFlex Drives Selection Guide	7000-SG010_
CENTERLINE® 2100 Motor Control Centers Selection Guide	2100-SG003_
CENTERLINE 2500 Motor Control Centers Selection Guide	2500-SG001_
Kinetix Motion Control Selection Guide	GMC-SG001_
Common Bus application reference materials	Search by respective product
Learn More About…	www.rockwellautomation.com/solutions/…
Intelligent Motor Control Solutions	…intelligentcontrol/
Integrated Architecture	…integratedarchitecture/
Safety Solutions	…safety/
Sustainability	…sustainability/
Essential Components	www.rockwellautomation.com/components

Rockwell Automation Services & Support

Global Support. Local Address. Peace of Mind.

Providing the resources you need, when and where you need them, Rockwell Automation has an integrated, global network of ISO-certified repair centers, exchange hubs, field service professionals, IACET-recognized training centers, certified technical phone support centers and online tools.

www.rockwellautomation.com/services

Meet Your Everyday Technical Needs

Online & Phone Support	Training Services	OnSite Services	Repair Services
• System level support • Unlimited, real-time support • Unlimited, online resources and tools • Live chat and support forums	• Instructor-led and computer or web-based courses • Virtual Classroom • Training Assessments • Workstations and job aids	• Embedded engineering • Preventive maintenance • Migrations and conversions • Start-up and commissioning • Troubleshooting and repair • Extended warrranty	• Product remanufacturing • Third-party repair • Annual repair agreements

Maximize Your Automation Investment

MRO Asset Management	Network & Security Services	Safety Services	Energy Services
• Warranty tracking • Consolidated asset reports • Quick access to global spare parts inventory • Owned and managed spare parts inventory	• Control system lifecycle services • Manage network convergence • Security technology, policies and procedures services	• Safety assessments • Safety design, integration and, validation services	• Energy monitoring and analysis services • General and comprehensive energy audits

Visit the Rockwell Automation Support Center, http://rockwellautomation.custhelp.com/ for technical information and assistance, plus:

- View technical/application notes
- Obtain software patches
- Subscribe for product/service email notifications
- Submit Questions, Chat Live, Support Forums and more

Visit Get Support Now, www.rockwellautomation.com/support to select your country and find your local support information.

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